

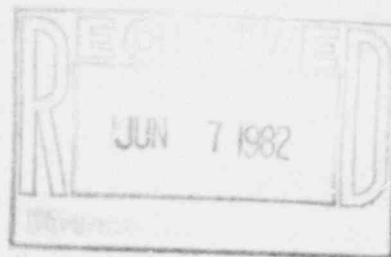


Omaha Public Power District

1623 HARNEY ■ OMAHA, NEBRASKA 68102 ■ TELEPHONE 536-4000 AREA CODE 402

June 1, 1982
LIC-82-203

Mr. J. T. Collins, Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011



Reference: Docket No. 50-285

Dear Mr. Collins:

Subject: Emergency Preparedness Appraisal

The Commission's letter to Omaha Public Power District dated May 4, 1982 reported the results of the Emergency Preparedness Appraisal for the Fort Calhoun Station. The appraisal included an assessment of our emergency preparedness program and the Fort Calhoun Station Radiological Emergency Response Plan (RERP). The results of the program assessment were detailed in Appendix A (Significant Appraisal Deficiencies), Appendix B (Preparedness Improvement Items), letter from J. T. Collins to W. C. Jones dated December 24, 1981 (Significant Appraisal Findings), and Inspection Report No. 81-35 (Emergency Preparedness Appraisal), all of which were attached to your May 4, 1982 letter. The results of the Emergency Plan assessment were detailed in Appendix C of your May 4, 1982 letter. A descriptive response of the District's completed and planned actions to the four items identified as "Significant Appraisal Deficiencies" in Appendix A (Attachment 1) and the results of our consideration of the items of Appendices B and C are attached (Attachments 2 and 3, respectively).

Please note that Appendix A detailed four specific deficiencies which were differently presented than in the confirmatory letter dated December 24, 1981. The District has addressed both the confirmatory letter finding and the corresponding "deficiency" in Attachment 1. However, we must express our concern that the initial findings were upgraded to deficiencies without consideration of the prompt actions taken by the District on these four concerns.

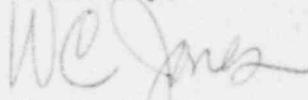
Omaha Public Power District has always demonstrated a responsible policy in matters involving safety. Since the adoption of final rule changes on emergency planning, 10 CFR 50 and 70, in November 1980, the District has effected many improvements. A brief review of the District's responses on this issue illustrates the District's commitment to effective emergency preparedness:

Mr. J. T. Collins
LIC-82-203
Page Two

1. January 1981 - Emergency Plan revised to 10 CFR 50 criteria.
2. March 1981 - New procedures manual implemented.
3. July 1981 - Information brochure to the general public published and disseminated.
4. August 1981 - Physical construction of new Technical Support Center completed.
5. September 1981 - All-weather vehicles with new field monitoring equipment acquired and operative.
6. October 1981 - Emergency Plan revised to NUREG-0654 format.
7. January 1982 - Public alert system including 95 sirens installed.
8. April 1982 - Construction of new Emergency Operations Facility begun.

The District believes it has been responsive in implementing current emergency preparedness requirements and correcting identified deficiencies. The District is correcting the reported deficiencies within an acceptable time period. The District is cognizant of the enforcement options quoted in 10 CFR 50.54(s)(2), but firmly believes such actions are not appropriate when equated to our performance and state of emergency preparedness. Rather, the District anticipates an acceptable emergency preparedness program designation based on the results of the appraisal report and the satisfactory correction of the four deficiencies of Appendix A.

Sincerely,



W. C. Jones
Division Manager
Production Operations

Attachment

cc: LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Avenue, N.W.
Washington, D.C. 20036

ATTACHMENT 1

OPPD Response to IE Emergency Preparedness Appraisal
Dated May 4, 1982

Appendix A
Significant Preparedness Deficiencies

Significant Preparedness Deficiency #1 - Onsite Emergency Organization Augmentation per Confirmatory Action letter of December 24, 1981.

The licensee shall conduct an evaluation of existing augmentation procedures to determine, for each of the major emergency functional duties listed in Table B-1 of NUREG-0654 (Revision 1, November 1980), the extent to which the augmentation times conform to the staff guidelines of 30 and 60 minutes. The evaluation should provide for a realistic assessment of the times when each position would have been filled under emergency conditions.

(1) Steps which have been taken:

An evaluation of augmentation procedures to determine augmentation times for each of the major emergency functional duties listed in Table B-1 of NUREG-0654 (Rev. 1, November 1980) was conducted. The results were reported to the Nuclear Regulatory Commission on March 1, 1982, and indicate realistic assessment times as low as 45 and 60 minutes as compared to the staff guidelines of 30 and 60 minutes.

(2) Steps which will be taken:

The District will continue to encourage employee residence near the Fort Calhoun Station site and assign emergency duties to the greatest extent practical to those persons with shorter travel distances. It is expected that this guide will maintain or possibly reduce the present reasonable reporting times.

(3) Schedule for completion:

The augmentation time evaluation and report were completed on March 1, 1982 as stated.

It is noted that Appraisal Report 81-35 references Finding 285/81-35-13.

-- Revise the emergency plan and procedures to include the augmentation of emergency personnel as specified in NUREG-0654, Revision 1, Table B-1 and provide a method to verify that there is reasonable assurance that the augmentation times can be met for the specified minimum augmentation staff.

The District's March 1, 1982 response together with the commitment for ten (10) person shift staffing by July 1, 1982 complete action on this deficiency.

Significant Preparedness Deficiency #2 - Personnel Accountability per Confirmatory Action letter of December 24, 1981

The licensee shall develop and implement procedures for the notification of appropriate authorities regarding the need for evacuation of offsite personnel who may be present in the owner controlled area during a site evacuation.

(1) Steps which have been taken:

The Fort Calhoun Station Radiological Emergency Response Plan was revised and new instructions issued on January 25, 1982. Correction to Section J describes the notification method which utilizes the early warning system. Section B sets the review and reporting responsibility within the owner controlled area as an onsite monitor duty.

(2) Steps which will be taken:

The District will continue its emergency Preparedness training and exercise program to maintain proficiency of emergency response personnel, including onsite monitors.

(3) Schedule of completion:

This action is presently complete. Revisions to the Radiological Emergency Response Plan and confirmatory report were completed on January 29, 1982.

It is noted that Appraisal Report 81-35 references Findings 285/81-35-55 and 285/81-35-57.

-- Develop and implement procedures to ensure that all persons in the licensee controlled areas, including areas across the river from FCS, are notified of any need to evacuate those areas and that adequate provisions are available to ensure the evacuation and accountability of those persons (285/81-35-55).

-- Correct the EIPs related to personnel accountability to provide for accountability of all persons in the owner controlled areas, including those persons across the river from FCS but still within the owner controlled area (285/81-35-57).

The District's January 29, 1982 response and action corrected Finding 81-35-55. As stated in that response, a review of the Implementing Procedures indicate no change was required related to persons in the owner controlled area as referenced in 81-35-57.

Significant Preparedness Deficiency #3 - Emergency Action Levels/Procedure Flow per Confirmatory Action letter of December 24, 1982.

The licensee shall integrate the Emergency Action levels (EALs) into the Station Operating Procedures and assure that the procedures are written in such a manner as to enable the reactor operations personnel to effectively and expeditiously move from normal operations, to abnormal operations, through emergency operations and into the emergency plan implementing procedure.

(1) Steps which have been taken:

As stated in the Districts January 29, 1982 response, the Station Emergency Procedures were revised by March 15, 1982 and other applicable operating procedures revised by May 1, 1982. The Emergency Action Levels have been incorporated into the Fort Calhoun Station emergency procedures where required. The District also reviewed the Fort Calhoun Station normal operating procedures and verified that the existing operating procedures adequately lead the operator from the normal to emergency procedures. These improvements ensure the transition from normal to abnormal operations through emergency operations and into the EPIPs occur in a timely and effective manner.

(2) Steps which will be taken:

The District will continue periodic review and improvements of operating and emergency procedures to maintain adequate operator instruction during the transition from normal plant operations.

(3) Schedule for completion:

These actions are complete

Applicable operating procedure revision was completed on April 30, 1982.

It is noted that Appraisal Report 81-35 references Findings 285/81-35-41 and 285/81-35-45:

- Correct the Emergency Procedure (EOPs) to provide specific guidance to the operator as to when Emergency Action Levels may be approached or exceeded and provide specific reference as to the exact EPIPs which should be initiated (285/81-35-41);
- Correct the appropriate EOPs and AOPs, where necessary to identify when Emergency Action Levels may be approached or exceeded and insure that the station operators can effectively and expeditiously move from normal operations, to abnormal operations, through emergency operations and into the appropriate EPIPs (285/81-35-45).

The District actions completed by March 15, 1982 and May 1, 1982 have provided the necessary corrections.

Significant Preparedness Deficiency #4 - Respiratory Protection per Confirmatory Action letter of December 24, 1981.

The licensee shall determine the expected number of onsite emergency personnel who may be required to perform essential duties under conditions of significant airborne radioactive contamination and who, therefore, require self-contained breathing apparatus in order to safely perform their assigned tasks. The licensee shall make provisions for acquisition of the necessary quantities of appropriate respiratory protection equipment and for locating the equipment in areas safely and quickly accessible to all onsite emergency response personnel. The licensee shall assure the NRC that all emergency response personnel will maintain their capability to safely and efficiently don appropriate respiratory protective equipment.

(1) Steps which have been taken:

As stated in the Districts March 19, 1982 response and the April 1, 1982 addendum to significant Finding #4, eighteen (18) additional self-contained breathing apparatus (SCBA) units are in the process of procurement. This action is the result of an internal evaluation which identified the expected number of onsite emergency personnel requiring SCBA units in order to better perform their tasks. The evaluation results set the number and location as forty (40) total units at seven (7) emergency response stations. Each area is quickly and safely accessible to persons who require the respirators. The District has also verified that the applicable personnel maintain a capability to don and use respiratory equipment in accordance with the Fort Calhoun Station Radiation Protection Program.

(2) Steps which will be taken:

Following receipt of the eighteen (18) additional SCBA units, the District will place these units into service within one month of delivery. Personnel whose duties require use of respiratory equipment will be identified and shall maintain the District respiratory use qualification.

(3) Schedule for completion:

Based on requisition processing and manufacturers delivery time, it is expected that eighteen (18) additional SCBA will be received, tested and placed into service prior to September 15, 1982.

It is noted that Appraisal Report 81-35 references Findings 285/81-35-19 and 285/81-35-40.

- Provide adequate respiratory protection equipment, in the Technical Support Center, for all emergency workers assigned to that area during an emergency (285/81-35-19);
- Provide adequate respiratory equipment for all emergency personnel that remain onsite during an emergency (285/81-35-40).

The District response to Significant Finding #4 and this response identified as Significant Deficiency #4 include consideration and action of the above improvement items.

ATTACHMENT 2

Responses to NRC Emergency Preparedness
- Appraisal, Dated May 4, 1982,
Appendix B items

OMAHA PUBLIC POWER DISTRICT CONSIDERATION
IE EMERGENCY PREPAREDNESS APPRAISAL
APPENDIX B
PREPAREDNESS IMPROVEMENT ITEMS

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
1	Assign the site representative for the Emergency Preparedness Development Program.	Assign appointment by official memorandum and record in Emergency Plan	Appointment letter 7/1/82 Plan Revision 9/1/82
2	Develop and implement a program for professional development training for individuals who are assigned Emergency Planning responsibilities which will enable them to attain and maintain a state-of-the-art knowledge in the field of emergency preparedness.	Emergency Preparedness Training Manual (Section 5) was reviewed and the program provides sufficient development to attain and maintain proficiency through the commitment "training shall include development courses to maintain state of the art knowledge".	The District believes that the existing programs adequately address this concern. COMPLETE
3	Develop and implement a method to provide substantive input of emergency preparedness plans and procedures.	Plant staff provides substantive input through existing training, drills, exercises participation, critiques, maintenance orders, safety meetings and suggestions programs.	The District believes that the existing programs adequately address this concern. COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
4	Develop and implement explicit selection and qualification criteria for individuals performing emergency preparedness development activities.	The District believes that the existing programs adequately address this concern.	COMPLETE
5	Develop and implement quality assurance procedures to evaluate the effectiveness of the emergency preparedness development training including the professional development program developed for persons assigned emergency preparedness development activities.	The District believes that the existing programs adequately address this concern.	COMPLETE
6	Correct Emergency Plan, EPIPs and EPTs to be consistent with the dated requirements of 10 CFR Part 50, Appendix E, and the guidance contained in NJREG-0654.	The Emergency Plan, EPIP and EPT will be reviewed and all identified deficiencies corrected by addition of the proper revision number and date.	12/1/82

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
7	Correct the EP and EPIPs to unambiguously specify, by duty title and emergency duty title, all persons assigned to the licensee's Onsite Emergency Organization and Recovery Organization.	The Manager - Fort Calhoun Station periodically issues an assignment and designation notice for the onsite emergency organization. This document specifies the duty position for the onsite emergency organization and the persons by name assigned to this position. Recovery Organization designates all persons assigned by normal duty title and emergency title in RERP, Section M and EPIP-RR-10 thru 62.	After review of this comment, the District believes designating onsite emergency organization duty positions by normal duty position title restricts selection of a best qualified individual and will continue to make appointment by individual name. COMPLETE
8	Provide documentation that formal assignments of all persons assigned to the Onsite Emergency Organization and Recovery Organization have been made.	The latest issue of Onsite Emergency Organization assignments is Memo EP-82-60 dated March 26, 1982. The Recovery Organization is assigned in Section M of the Emergency Plan and EPIP-RR series by title. Identification of the Recovery Organization personnel by name was last done in Memo EP-82-49, dated 3/19/82 issued by the Division Manager/Production Operations.	After review of this comment, the District believes the optimum method for formal assignment of persons by name is by the periodic update and distribution of memorandum issued by the responsible manager. COMPLETE
9	Remove inconsistencies between the EP and EPIPs including corrections to remove unintended duplication of assigned responsibilities.	The duplication identified is in the process of correction. The District is unaware of other inconsistencies.	The District will complete this correction and future identified duplications through the normal procedure change process. EP & EPIP Revision 9/1/82

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
10	Correct the EP and EIPs by unambiguously defining the authorities of all individuals assigned to the Onsite Emergency Organization and Recovery Organization.	On December 17, 1981 the OPPD Board of Directors approved Resolution #3083 which authorizes and directs the General Manager to take actions required by the Radiological Emergency Response Plan. The General Manager subsequently designated the RERP as the official District Plan and authorized persons occupying positions in the Plan to conduct activities necessary to fulfill their responsibilities described in the Plan.	Resolution #3083 approved by the Board and the designation of authority issued by the General Manager shall be added to the Emergency Plan as an Appendix. RERP Revision 9/1/82
11	Develop and Implement specific lines of succession for all positions in the management structure for the various functional response areas of the Onsite Emergency Organization	The District has reviewed this consideration and believes a line of succession already established for the EDO position is necessary. It ensures one individual is responsible for the complete corporate emergency response decisions. The preparation for the position can be accomplished by a strong, general knowledge of the RERP. However, for the positions in the Onsite Emergency Organization, an experienced individual with technical preparation for the specialized duties is required. This is best accommodated by technical training of a primary and alternate member which is considered more appropriate than a line of procession arrangement.	The District believes the line of succession for the EDO position and the member-alternate staffing of other onsite emergency organization positions provides the strongest emergency staffing. COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
12	Develop and implement selection and qualification criteria for individuals assigned to perform emergency actions and decision making as members of the On-site Emergency Organization and Recovery Organization.	The Emergency Preparedness Training Manual establishes the selection and qualification requirements for personnel assigned duties within the RERP. Completion of the training ensures the requirement has been satisfied. Personnel selection includes adherence to appropriate standards and experience requirements followed by rigid, specific training with practical demonstration of duties prior to final qualification acceptance.	The District believes an adequate selection and qualification criteria currently exists. The District believes after its review that the Training Manual controls provide adequate selection and qualification criteria.	COMPLETE
13	Provide in the Emergency Plan copies of up-to-date letters of agreement or contracts which demonstrate that arrangements have been made with off-site organizations (both commercial and private) to supply specifically defined support or cooperation during an emergency including their authorities, responsibilities, and limits of actions.	The letters of agreement contained in Appendix A have been reviewed and generally contain sufficient specificity and are up to date. Authority and responsibility are also encompassed by governmental and corporation policies. However, limits of action are usually not defined.	Appendix A shall be re-reviewed in accordance with the annual schedule commitment with the goal to improve specificity, with emphasis on limit of actions for support groups. Where required new letters will be obtained based on this review.	Revise letters 6/1/83

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
14	Complete the implementation of all existing EIPs	Thirteen procedure changes and four new procedures have completed formal review and approval. They are presently being printed prior to issue and distribution. Two of the five procedures cited were implemented during the early part of 1982.	Complete implementation of all existing EIPs will be completed within 30 days.	EPIP revisions 7/1/82
15	Develop and implement a program to train all emergency response personnel in the proper use of all equipment which would actually be required to safely perform their assigned tasks under emergency conditions, including walk-through training while wearing full respiratory protection and protective clothing.	Radiological training for restricted (blue) classification and unrestricted (red) classification includes instruction in proper use of protective clothing and respiratory protection. Respirator fit test and class clothing wear ensure practical application of this knowledge is demonstrated.	A review of personnel required to remain at Fort Calhoun Station will be conducted. Controls will be initiated to ensure all persons identified maintain either the restricted or unrestricted radiological classification and receive SCBA instruction.	Revise RERP and/or Training Manual 9/1/82.
16	Develop and implement, for the Control Room, a controlled telephone list of personnel and agencies to be contacted during emergencies, including provisions to maintain and	EPIP-OSC-2 and EPIP-RR-1 have procedure changes (re: item 14 above) in progress which provide controlled telephone lists and quarterly verification.	EPIP-OSC-2 and EPIP-RR-1 will be revised, issued and implemented within 30 days including a controlled telephone list for the Control Room.	EPIP Revision 7/1/82

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
16	(Continued)		
	verify the phone numbers at least quarterly.		
17	Provide radiological monitoring equipment, with both visual and audible alarms to detect radiation and airborne radioactive contamination in the Control Room.	In response to NUREG-0737 items II.B.2, III.D.3.3 and III.D.3.4 modifications were implemented at the Fort Calhoun Station to: (1) provide means to measure airborne activity in all areas required to be accessible following a DBA and (2) to ensure adequate shielding is provided to allow entry to all areas which must be accessible. Accordingly the means have been established to protect people located in the Control Room from direct or airborne radiation.	No further action required COMPLETE
18	Provide permanently installed radiation monitoring equipment, with both visual and audible alarms to indicate both radioactive airborne contamination and direct radiation in the TSC.	See answer (above)	No further action required COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
19	Provide adequate communications in the main conference room of the TSC for communicating with the Control Room and the Emergency Operations Facility.	Outfitting of the new TSC will continue with special attention to communication, monitoring and assessment equipment until the TSC is satisfactorily equipped. At that time the transition for use of the new bldg for emergency response will be completed.	9/1/82
20	Develop or revise existing procedures to reflect the location of the Alternate EOF and directions from the station to the facility.	The District is constructing a new EOF approximately 17 miles from Fort Calhoun Station. Completion of structure will allow the emergency response to be directed always from one facility and an alternate facility a greater distance from the site will no longer be necessary. The Plan and procedures will be corrected at that time to accurately describe the new facility.	Revised Plan and Procedures 60 days after completion of EOF. Present schedule is 1/1/83.
21	Develop and implement methods and procedures (e.g., seals, minimum stock levels etc.) to assure that dedicated emergency equipment and supplies are indeed available when needed for emergency response.	The District believes its present surveillance method is more comprehensive than the suggested seal method. In addition it provides instrument and battery operability verification. The District intends to continue the present surveillance tests.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
22	Develop and implement procedures for reinventory of equipment or supplies when tamper indicating devices are removed or broken.	The District appreciates the proposal of alternate methods, but opts to continue its preferred method.	COMPLETE
23	Upgrade existing personnel decontamination facilities to provide ready access to all necessary decontamination agents at the decontamination room.	Sodium citrate and large containers required by the procedure when iodine on the skin must be removed, have been available at the adjacent storeroom. These supplies will be permanently transferred to the emergency decon station for optimum access.	9/1/82
24	Provide additional fixed and portable radiological shielding where practical, to aid in the reduction of exposure to sample and analysis personnel (including sample transport devices)	Revision of OI-PAP-1	7/1/82

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
25	Evaluate capabilities for meeting the 3-hour sample and analysis time frame if the radio-chem lab becomes uninhabitable due to elevated radiation levels.	The counting system at North Omaha Station will be evaluated and if necessary upgraded.	Evaluation Complete 9/1/82
26	Evaluate high-level sample counting limitations of both GeLi systems under present counting geometries.	Counting limitations will be evaluated. Sample size counting time, and geometrics will be modified if shown necessary.	9/1/82
27	Develop and implement procedures for maintaining routine efficiency and calibration checks of the NaI backup counting system at the North Omaha Station.	The District believes that SO T-13 and CP-LAB-10 provide adequate control to maintain efficiency and calibration of the MCA at the alternate EOF.	COMPLETE
28	Install in the station decontamination area adequate communications for contacting Health Physics personnel.	An Engineering Evaluation Assistance Request (EEAR) will be initiated through the Plant Staff as the normal procedure to install a Gaitronic set at the Station Decon Area.	EEAR Submittal 7/1/82 Expected Installation 12/31/82

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
29	Provide in both decontamination facilities adequate and necessary supplies for personnel decontamination.	Both decontamination facilities are equipped with basic supplies. The quantities were installed, evaluated and operating experience has proven them to be adequate, especially within the plant. In addition; great quantities are stored in areas in close proximity to decon facilities.	Access to sodium citrate and a large storage container for the EOF decon station is being taken as action to item noted on page B-10.	COMPLETE
30	Provide permanent instructions in both decontamination facilities to contact Health Physics upon determining that the individual(s) are contaminated and provide a communication system to accomplish the notification.	The decon area within the plant has personal decon instructions identical to those in the Radiation Protection Manual posted. Standard operating practice is for each individual to start self decontamination prior to arrival of HP personnel. The EOF decon facility is continuously manned during emergencies by a decon monitor. The decon monitor is guided by an EPIP. The District program places decon duties with the monitor and not the contaminated person. Therefore the District believes it inappropriate for decon procedures to be posted. The EPIPs are available at the Emergency Operation Facility.	The District believes its decon procedures at each facility are commensurate with its mode of operation and present policies are adequate and appropriate.	COMPLETE
31	The adequacy of the Expanded Support Facilities will remain an Open Item for future resolution until final plans are prepared and construction authorized by OPPD for those facilities.	As noted, the District has a new TSC under construction and has planned construction of an offsite EOF.	The District interprets that no additional consideration or response is required to this item.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
32	Perform an evaluation to determine what additional electrical service would be needed by news media representatives during an emergency and provide such a capability in the MRC.	The Omaha/Douglas County Civil Defense Emergency Operating Center was selected as the Media Release Center because the facility is specifically designed and constructed for this type of service. It has been used successfully during disasters such as the Omaha Tornado of 1975.	The District will re-evaluate whether the Omaha/Douglas County Civil Defense Emergency Center should have additional electrical service for news needs.	9/1/82
33	Replace the small hand-held high range instrument in the Control Room Locker with an extendable probe high range instrument.	The District has reviewed this improvement item and believes it's adaption is commensurate with District ALARA policies.	ST-RM-3 will be revised to replace the hand-held high range instrument in the Control Room with an extended probe high range instrument.	8/1/82
34	Develop and implement procedures to calibrate all meteorological instruments and equipment on a quarterly basis.	The calibration of meteorological equipment and instruments has been performed for many years in accordance with procedures CP-6272 through 6285. The calibration tests and frequency, initially once per year and later increased to biannually, have provided a very good availability and performance of the equipment.	The District believes the operating experience of six years with the present meteorological instruments and procedures demonstrate reliable service with 6 month calibration frequencies. This record provides sufficient basis to continue the present calibration.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
35	Develop the capability for remote interrogation of the meteorological system by off-site agencies in accordance with Regulatory Guide.	See next column	These provisions will be provided following the full implementation of the emergency response facilities. June 1983	
36	Provide a detailed description of the dose assessment methodology and how meteorological information is used in that model.	<p>The detailed description of the dose assessment methodology is described in Section I.3 of the Plan and in the appropriate emergency plan implementing procedures (EPIPs). All of the applicable EPIPs require the use of on-line (real time) meteorological data as a primary source. The meteorological models for the on-line computer have been reviewed by the NRC in the past; i.e., 1974, 1975 and 1976. If the real time meteorological data are not available then the dispersion factors are obtained from the overlays. The meteorological model for the development of overlays is based on the following standard caussian diffusion model:</p> $\bar{xu}/Q = \left(\frac{1}{2\pi \sigma_y \sigma_z} \right) \exp(-y^2/2\sigma_y^2) \times \left(\exp\left\{-\frac{(z-h)^2}{2\sigma_z^2}\right\} + \exp\left\{-\frac{(z+h)^2}{2\sigma_z^2}\right\} \right)$ <p>Where:</p> <ul style="list-style-type: none"> x is the radionuclide downwind concentrate, Ci/m³ u is the average wind speed. m/sec, Q is the radionuclide release rate, Ci/sec. σ_y is the horizontal dispersion coefficient of the plume per Pasquill class, m. σ_y¹ is the vertical dispersion coefficient of the plume per Pasquill class, m. y is the crosswind distance from the plume centerline, m z is the vertical distance from the plume centerline, m h is the release altitude, m 	The District believes existing models are adequate as described.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
(Continued)	<p>Z is assigned a value of zero, corresponding to a ground level dose point for the preceptor and for a ground level release 'h' is equal to zero.</p> <p>Therefore, the above equation can be simplified as:</p> <p>as: $\bar{x}u/Q = \left(\frac{1}{\sigma_y \sigma_z} \right) \exp \left(-\bar{y}^2/2 \sigma_z^2 \right)$</p>		
37	<p>Perform an analysis to determine how a release plume from FCS may be modified by terrain induced effects and provide the results of the study in the emergency plan.</p> <p>The terrain in the vicinity of Fort Calhoun Station is generally flat from the north, northeast, east and southwest sectors, with an elevation of approximately 1000 feet above mean sea level (MSL), for a radius of at least 10 miles. This terrain is generally the flood plain of the Missouri River. The terrain in the remaining sectors, south-southeast through west-northwest show much greater relief from the low lying, cut by numerous ravines. These bluffs extend along the western bank of the Missouri River, which runs generally from the northwest to the southeast and comes within about one mile of the Fort Calhoun Station in the south through west-southwest sectors.</p> <p>Two possible weak effects in the site meteorology are: 1) under very light westerly wind flow there is a possibility of weak drainage flow off the bluffs to the west toward the river, and 2) there will possibly be a slowing down of weak winds as air flows across the river from the east to west and meets the slowly rising terrain to the west. Neither of these effects are regarded as significant in their influence in the site meteorology.</p>	<p>This information will be incorporated into the next major revision of the Rad Emergency Response Plan.</p>	12/31/82

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
38	Correct the EIPs to identify the individuals by title who have the authority, responsibilities, and qualifications necessary to perform the tasks governed by the procedures.	The District identifies in its Emergency Preparedness Training Program the specific implementing procedures which each member performs. The training manual as well as the lesson plan for each member includes the title with responsibilities and qualifications to function in the emergency position.	The District believes the identification of emergency personnel by title with authority responsibilities and qualifications is properly provided in both the RERP and Training Manual. EPIP would be repetitive and not enhance the present program.	COMPLETE
39	Correct the EIPs to allow on a single individual to perform the procedure or separate all steps to be performed by an individual from the steps to be performed by other individuals.	The District has designed its implementing procedures to accomplish the required task in an efficient and expeditious manner. Each person who has received training and been assigned to perform that task is equally qualified to perform it in its entirety. The District's method provides cross training of personnel and builds a larger manpower resource to cope with unforeseen emergency circumstances within the planning criteria.	The District believes its method of training emergency personnel to perform the complete procedure rather than only a part provides for a stronger and more knowledgeable emergency response organization. The District will continue to review and upgrade procedures as a method to maintain effective performance.	COMPLETE
40	Correct the EIPs to provide checklists or other methods to ensure that all necessary procedural steps are completed at the proper time.	Although the EIP do not contain specific checklists, they have been prepared in a performance sequence with a more important action placed prior to a lesser important action. However, in many instances more than one action may be in progress simultaneously. The present form of the EIPs allow these corrective actions to be occurring within specific time intervals. This procedural method together with the corresponding training provides a more timely emergency response.	The District believes a firm sign off policy with a set sequence completed before the next action can be performed is not desirable. The District believes its procedural method patterned after Chemistry and Health Physics procedures is more workable and preferred.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
41	Correct the EPIPs to specifically identify those duties and responsibilities which may not be delegated by the EDO.	The RERP and the lesson plan for the EDO specifically identify those duties and responsibilities which may not be delegated by the EDO. These programs have provided the requirement and training to ensure these duties clearly remain with the EDO.	The District agrees that the delineation of EDO duties and responsibilities which cannot be delegated can be more effectively controlled in an EPIP. This change will be accomplished. The District will also evaluate the removal of this duty list from the RERP or lesson plan in order to avoid repetition.	4/1/83
42	Develop and implement procedures to provide adequate forms for the documentation of emergency radiological survey results.	Procedures have been developed and implemented to document emergency radiological survey results. EPIP-OSC-10, EPIP-EOF-4, EPIP-EOF-5, EPIP-EOF-6, EPIP-EOF-15, EPIP-EOF-16, EPIP-EOF-18 and EPIP-RR-6 contain tables to document either survey or dose assessment results.	The District believes its new procedure and procedure change efforts provide adequate forms for recording survey results now. The District does not believe more changes are warranted unless identified through training and exercises.	COMPLETE
43	Provide a controlled copy of the OI-PAPs for use in the RAD-CHEM Office.	As noted by the Appraisal, only two controlled or official copies of all documents are maintained at the station. However, additional numbered copies are maintained up-to-date with all revisions and issue changes. Up to date copies have been placed and will be maintained in the Chemistry office and the Health Physics office.	Standing Order G-30 provides the administrative procedure and control for updating the Operating Instructions.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
44	<p>Incorporate specific ALARA measures and considerations into the OI-PAPs and CMPs.</p> <p>The District has issued a formal management policy and administrative procedure effective June 1, 1982 to confirm its commitment to ALARA practices. However, the District has previously applied ALARA principles in a less formal manner. ALARA measures and considerations in this form were included during the preparation of operating and emergency procedures such as the OI-PAPs and CMPs referenced.</p>	<p>The District will continue to formalize its ALARA program by specific procedures within the FCS Radiation Protection Manual and departmental instructions.</p>	COMPLETE
45	<p>Correct the OI-PAPs and CMPs to include provisions for labeling storage, and disposition of sample.</p> <p>Secton 2 of the Chemistry Procedures Manual (CMP-2) provides general philosophy for sampling techniques including labeling and storage of samples. Individual chemistry procedures also contain provisions and precautions during the handling of radioactive samples.</p>	<p>A review and evaluation will be conducted within the normal bi-annual review schedule to ensure sufficient provision for labeling, storage, and disposition of sample as provided in OI-PAP and CMP procedures.</p>	2/28/83
46	<p>Provide the shielded sample transport cart for use as stated in OI-PAP-1.</p> <p>See Item ID B-24</p>	<p>OI-PAP-1 will be revised.</p>	7/1/82
47	<p>Take measures to assure habitability of an adequate sample analysis facility under severe accident situations.</p> <p>See response to item ID B-25 above.</p>	<p>See Item page B-11 above</p>	<p>EVALUATION COMPLETE 9/1/82</p>

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
48	Evaluate present counting systems for high-level sample counting abilities and limitations.	See item ED B-26 above.	EVALUATION COMPLETE 9/1/82
49	Develop and implement methods to adequately mark assembly areas and the routes to be taken to get to the assembly areas.	The General Employee Training program provides the description of the on-site assembly area and instruction for the normal route to the area. EPIP-OSC-2 directs the Shift Supervisor to make a general announcement along with the sounding of the plant nuclear alarm. The implementing procedure also provides for special instruction if the normal plant exit route must be altered.	The District believes that adequate methods for designating emergency assembly areas and exit routes exist within the GET and EPIP programs.
50	Correct the EIPs to reflect the single individual that will receive and account for personnel immediately following the incident and maintain continuous accountability thereafter.	EPIP-EOF-9 <u>Personnel Accountability</u> was reviewed and Rev. 1 issue 4/23/82. Improved accountability methods were incorporated into this procedure.	EPIP-EOF-9 will be reviewed again and a single person designated for maintaining immediate and continuous accountability thereafter.
51	Develop and implement specific personnel monitoring and decontamination procedures in the EIPs which will provide for	In response to the recent INPO evaluation, the District committed to establishing a program for improving the reporting, investigation and tracking of personnel contamination incidents.	The Radiation Protection Manual will be revised to include the subject program. The EIPs will be revised to reference the appropriate procedures in the RPM.

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
51 (Continued)	thorough investigation of any contamination incident and documentation of the results of any decontamination procedure and subsequent bioassay.			
52	Develop and implement specific procedures governing the duties, authorities, and responsibilities of Security Personnel during an emergency.	As noted, security actions during emergency conditions are described in EPIP-OSC-7 and SCP-19. An additional procedure EPIP-EOF-12 <u>Site Security</u> was not referenced but has been implemented as the main instruction during radiological emergencies.	The District will review existing procedures and issue revisions as necessary to implement specific duties of Security personnel, especially upon declarations of a General Emergency.	12/1/82
53	Develop and implement procedures with specific criteria upon which the emergency class may be downgraded and provisions for notification of Federal, State and local officials prior to entering a downgraded mode of emergency response operation.	As noted by the appraisal, specific procedures EPIP-OSC-1 and EPIP-RR-1 are in effect to categorize emergencies into one of four classifications based on the guidelines of Appendix I of NUREG-0654. The licensee is responsible to establish the classifications and consistently provide this information to local, state and Federal response groups. The responsibility of the licensee to set the accident classification does not appear to be limited to increasing accident severity only.	The District believes the present accident procedures with provision to reduce the accident classification designation are appropriate and intends to maintain this method.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION	
54	Include the NRC and FEMA on the list of interfacing organizations in the MRC Section B, Figure B-4, of the Emergency Response Plan.	Figure B-4 depicts the principal interfaces among onsite organization and offsite response centers. As such, the NRC is shown with principal interface to the licensee TSC and EOF for which space has been allocated.	In accordance with the appraisal report request, Figure B-4 will be corrected to show the NRC and FEMA interface in the NRC.	12/15/82
55	Develop and implement formal procedures for radiation monitoring equipment inventory, including acquiring new instruments retiring old or lost instruments, and instrument calibration due dates.	During the nine years of reactor operation Fort Calhoun Station has developed and implemented adequate procedures for controlling calibration, function test, inventory, repair, etc for radiation monitoring equipment as evidenced by procedures S.O. T-13, CP-HP-1 thru 19 and FCP-HP 1 thru 3.	The District believes it has sufficient procedures and controls for optimum utilization of radiation monitoring equipment for reactor plant operations.	COMPLETE
56	Review and evaluate the usability of existing procedures and instruments, used during emergencies, for human factors engineering correction.	To the greatest extent practical, implementing procedures are developed by persons experienced in the specific instrumentation. The author then tests the procedure. The procedure is also tested during training and drill sessions. Human factors inputs are included in resulting revisions. Human factors engineering is incorporated into instruments based on initial selection by experienced technicians and supervisors knowledgeable in many areas. The procurement of instruments from leading manufacturers receptive to customer preference is another means of acquiring human factor engineering for the District program.	As a viable program encompassing training, reviews, drills and critiques, the emergency program reviews continuously human engineering factors or comments are which evaluated and adopted into the program. The District believes human factor engineering is inherently included in the existing RERP and EPIP.	COMPLETE

APPENDIX B (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
57	As evidenced by Appendix A of the RERP, letters of agreement exist and are reviewed annually. The District has entered into these agreements in good faith and firmly believes each group will honor its commitments. However, no absolute certainties are possible. Each organization is known to have operated reputably in the past and has demonstrated moral obligation to the public.	As stated in the response to item page B-6 above, the District shall continue the annual review of letters of agreement to ensure they are still acceptable.	RERP review 12/1/82
58	<ol style="list-style-type: none"> 1) Emergency action levels (EAL) were discussed with and agreed on by the licensee, state and local governmental authorities as evidenced by the publication of consistent EAL tables in the OPPD, Nebraska, Iowa, Washington County and Pottawattamie County Emergency Plans. 2) Emergency Preparedness Tests (EPT) have been developed and implemented to administer surveillance commitments. EPT-9 provides a controlled method for the review and correction of the RERP including the EAL on an annual frequency. EPT-12 provides a controlled method for District and offsite governmental officials to review emergency preparedness programs and discuss improvements. 	The District believes adequate methods exist to maintain consistent and correct EAL with state and local governmental authorities.	COMPLETE
Review all letters of agreement with offsite support organizations to ensure that all are still acceptable and will be honored, and ensure that adequately detailed letters of agreement exist for all organizations the licensee will depend on for aid during an emergency.			
Ensure that the EALs and their associated response actions are discussed with and agreed on by the licensee, State, and local governmental authorities and develop and implement a method to review the continued acceptability of the EALs and their associated response action with the State and local governmental authorities on an annual basis.			

ATTACHMENT 3

Responses to NRC Emergency Preparedness
Appraisal, dated May 4, 1982,
Appendix C items

OMAHA PUBLIC POWER DISTRICT CONSIDERATION
 IE EMERGENCY PREPAREDNESS APPRAISAL
 APPENDIX C
 EMERGENCY PLAN EVALUATION REPORT

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
<p>The levels of on-shift staffing shown in Table B-1 of the plan do not meet the requirements of Table B-1 of NUREG-0654. a) there should be one Shift Foreman (SRO) on shift rather than the Reactor Operator (RO); the Notification/Communication position should not be provided by a shift person assigned to other functions; c) for the in-plant surveys, there should be one HP technician and one Rad/Chemical Technician. In addition: a) no times of arrival are given for the staff augmentations; b) no electrical maintenance personnel additions are provided where two are required; and c) the total number of staff additions is listed as 26, while</p>	<p>The District has committed to meeting Table B-1 on shift staffing requirements by July 1, 1982. The Districts augmentation capabilities have been identified in our letter dated March 1, 1982.</p>	<p>The District will meet Table B-1 on shift staffing requirements. The District presently provides for timely augmentation as detailed in our letter of March 1, 1982.</p>	7/1/82

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
(Continued)			
<p>the correct total in Table B-1 is 24. The plan provides no statement of the licensee's intention to meet the required staffing by July 1, 1982.</p>	<p>Section 2.2.1 and Section 2.2.3 specify the EDO as the person responsible for the overall emergency effort which must include notification of offsite authorities. Implementating procedures EPIP-OSC-2, 5, and 6 provide the method for notification of local and state authorities by the "Shift Supervisor and/or EDO" "or his designee."</p>	<p>The District believes the Radiological Emergency Response Plan supported by the appropriate implementing procedure provide sufficient authority and direction to perform offsite notification.</p>	COMPLETE
<p>The licensee has apparently interpreted the term "EAL" to mean "initiating condition" inasmuch as he has used initiating conditions as EALs and has not developed EALs compatible with</p>	<p>The EALs as defined in Section D.1.0 of the plan are based specifically on Appendix 1, NUREG-0654, Rev. 1. The example initiating conditions are defined for each EAL similar to ones provided in Appendix 1, NUREG-0654. It should be noted that the District has used the same format in the Plan as provided in NUREG-0654, Appendix 1. The District believes it is in compliance with this document.</p>	<p>The District will evaluate Section D to determine which improvements, if any, can be implemented.</p>	12/31/82

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
(Continued)			
<p>those in NUREG-0818. The licensee should review applicable portions of the plan and develop EALs for the example initiating conditions in Appendix 1, NUREG-0654 in accordance with criteria in NUREG-0818.</p>			
<p>The following initiating conditions, incorrectly called EALs in the plan, were not addressed: <u>Unusual Event:</u> 12 and 17. <u>Alert:</u> 16 and 19. <u>Site Area:</u> 9, 14, and 17.</p>	<ol style="list-style-type: none"> 1) Initiating conditions 12 of unusual event; 16 of alert; 14 of site area and 3 of general emergency are related to plant security and are, therefore, detailed in the Fort Calhoun Station Security Plan. 2) Initiating conditions 17 of notification of unusual event; 19 of alert; 9 and 17 of site area and 7 of general emergency are not applicable as EAL's for Fort Calhoun Station operation. 	<p>The District will continue an annual review program and incorporate proper improvements as they are identified.</p>	COMPLETE
<p>Also, Section 6.0 indicates that "Only those events which have the clear potential for escalating to a Site Area Emergency warrant</p>	<p>Section E.1.1 <u>Initial Notification</u> commits notification to the NRC and offsite governmental agencies for <u>all</u> emergency classes. EPIP-OSC-2 supports and directs this method. The intent of the statement quoted in Section 6.0 was to illustrate that a Notification of Unusual Event may have been experienced and corrected prior to the offsite notification.</p>	<p>The District will revise Section D.6.0 and re-write or eliminate this statement in order to demonstrate the intent of 10CFR50.</p>	8/1/82

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
(Continued)			
prompt notification of offsite authorities." This does not meet either the letter or the intent of the NRC regulations.			
Even though the OSC appears to be part of the control room complex (Figure H1) the plan should indicate if the OSC has the same habitability as the control room.	Construction and ventilation equipment provides the same habitability to the control room and the shift supervisor area utilized for the Operations Support Center.	The District will continue use of the Shift Supervisor area as the OSC based on its acceptable habitability and proximity to the control room.	COMPLETE
The plan does not specifically identify wound, portable monitors, or sampling equipment.	Section H.2.3 describes emergency equipment and supplies and references Table H-1 for the detailed list according to emergency response facility location. Portable monitors and sampling are readily identifiable. The RM-14 and RM-15 with hand probe are designed for personnel frisking and are used per procedure EPIP-EOF-3 for skin and wound surveys.	The District believes wound, portable monitors or sampling equipment are identified in Table H-1 adequately for persons familiar with basic radiation protection. The District will verify this understanding during training and drill sessions, but initiate appropriate classification thru normal plan administration if future need is shown.	COMPLETE

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
The plan does not indicate if hydro-logic information is available from any other source than the one indicated in Section I.2.1.3.	Two sources appropriate for river level indication are provided in Section I.2.1.3 of the Plan.	No further action required.	COMPLETE
The plan does not indicate if offsite monitoring devices meet the minimum NRC Radiological Assessment Branch Technical Position for the Environmental Radiological Monitoring Program.	The guidelines provided in the NRC Branch Technical Position were considered for the selection of dosimetry instruments.	The District believes that the selected locations for the offsite monitoring devices are adequate for the important data acquisition following an accident.	COMPLETE
Cameras are not listed as part of the contents of emergency kits.	The District has demonstrated the criteria of H-9 and used items termed 'examples' as guidance in the development of the RERP. Sample items respiratory equipment, protective clothing, portable lighting, portable monitoring equipment and communications equipment are included in the Plan and at response facilities because their use is necessary to perform appropriate emergency actions. The District was unable to identify the use of cameras for emergency actions.	The District believes cameras are not required for emergency response at the onsite operations support center. However, cameras are a resource within the Recovery Organization.	COMPLETE

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
<p>The plan does not categorically address provisions of this criterion for the operation, inventory, calibration, repair, and/or replacement of emergency equipment/instrumentation. Section M2.3.5(7) does state that the Supervisor of Health Physics/Chemistry has responsibility for ensuring optimum operation of radiation/chemistry instruments/equipment.</p>	<p>Criterion 10 requires provisions to inspect, inventory and operationally check emergency equipment/instruments at least each calendar quarter and after each use. Section H-2.3. of the RERP address the provision in reference to procedures ST-RM-3 and Standing Order T-13. The OPPD commitment goes beyond the criteria with a monthly surveillance frequency. Provisions for repair and/or replacement of instruments is not directly addressed in Criterion 10. Therefore the statement in Section M2.3.5(7) provides assurance that these actions are provided by normal plant operating procedures under the responsibility and direction of the Supervisor of Health Physics/Chemistry.</p>	<p>The District believes that adequate provisions presently exist with the RERP and supporting procedures program to ensure proper operations, inventory, repair, and replacement of emergency response equipment and instruments.</p>	COMPLETE
<p>Section I-1.0 of the plan does not identify plant system status or effluent parameter values corresponding to initiating conditions in Appendix L, NUREG-0654 (see Standard D comments). The Plan indicates that the kinds of instruments used and their capabilities are in the facility procedures.</p>	<p>The plant system status and the effluent parameter values are discussed throughout Section I, "Accident Assessment", of the Plan. They are based on/derived from the the example initiating conditions in Appendix 1 of NUREG-0654 Rev. 1.</p>	<p>The District believes plant system status or effluent parameters have been adequately addressed. The District will continue annual reviews of the Plan and provide proper corrections as identified.</p>	COMPLETE

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
The licensee fails to state in the plan if onsite capabilities and resources defined in the criteria are in accordance with NUREG-0578.	NUREG-0578 is modified by NUREG-0737 including short term as well as long term modifications, many of which are still being implemented. Any deviations in requirements or schedule have been communicated to and approved by the NRC to date. In fact, much criteria of NUREG-0578 has been superceded by NUREG-0737 and later guidance and is expected to undergo future changes. Therefore, the District cannot make an unequivocal statement that on-site capabilities and resources defined in the criteria are in accordance with NUREG-0578.	The District's position on NUREG-0578 requirements is well documented and inclusion in the Emergency Plan would be inappropriate.	COMPLETE
Section I3.2 implies the capability to detect radioiodine as low as 10 ⁻⁷ mCi/cc. The Plan does not, however, contain a definite statement in this regard.	The instrument used in the field monitoring (SAM II) does have the capability to measure/detect the radioiodine concentration in the plume EPZ as low as 1.0E-07 μ Ci/cc. A footnote under subsection I.2.3.3 will reflect this value.	Add a footnote under Sub-section I.2.3.3 of the Plan.	COMPLETION by 12/31/82.
The relationship of various measured parameters to dose rates for key isotopes (i.e., those in Table 3, page 18, NUREG-0654) is not addressed. Section I2.2.6 refers to OI-PAP-2 "Post-Accident Determination of Isotopic Specific Activities" that is unavailable for comment.	OI-PAP-2 has been added to the operating instructions of the Plant Operating Manual. Also the relationship of various measured parameters to dose rates for key isotopes is addressed in EPIP-EOF-6. Thirteen copies of this procedure have been submitted to the NRC.	The District believes implementing procedures adequately and properly provide key isotope to dose rate relationships.	COMPLETE

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
<p>The Plan does not address the time required to warn or advise individuals of an emergency. There is also no specific discussion of the means used for evacuation of on-site visitors and contractor/contractor personnel. In addition, the plan does not address the means used or time required to warn or advise people who may be outside the protected area but inside the owner controlled area.</p>	<p>Section J.1.1. and J.1.2. of the RERP provide the information required by criterion 1 with supporting procedures in the following manner: 1) Onsite personnel are notified by a site nuclear emergency alarm and receive additional instruction by the intra-plant public address system (Gaitronics). Implementing procedure EPIP-OSC-2 requires this step as the first action by the Shift Supervisor after recognition of an emergency. Therefore the District believes the warning time for on-site personnel to be immediate or within a few seconds. 2) The Plan indicates onsite personnel including visitors, contractors and non-emergency assigned employees, evacuate to the storeroom assembly area and receive further instruction. The General Employee Training supports this discussion by requiring alarm recognition, assembly area, designation, vehicle availability for site evacuation and relocation area as required knowledge prior to unescorted access to Fort Calhoun Station. In addition, FCS procedures require trained escorts for visitors who exhibit insufficient knowledge. The referenced J Sections of the RERP were revised Jan. 25, 1982 to provide the specific means used for warning, accountability and evacuations of all persons within the owner controlled area. The procedure assigns the on-site monitors the responsibility to inspect the area and direct everyone present to vacate in accordance with evacuation instruction. Thirteen copies of this revision have been submitted to the NRC as required by 10CFR50.</p>	<p>The District believes the RERP addresses all the criteria of J-1 with supporting basis provided by applicable implementing and training procedures. In accordance with the maintenance of of the preparedness, the District will continue to review, train, and exercise in accordance with the plan and initiate improvements as identified by these functions.</p>	COMPLETE

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
No reference is made to conducting exercises according to NRC and FEMA rules and specific provisions for conducting critiques as part of drills are not addressed.	1) The District believes the statement "exercises shall be conducted as set forth in NRC and FEMA rules" is ambiguous and non-definitive. The District is committed by its Operating License from the NRC to comply with the provision of 10CFR50 which clearly provides sufficient rules for the conduct of exercises in 10CFR50.47 and 10CFR50 Appendix E. The District believes the provisions of 10CFR50 are sufficiently authoritative and do not need replacement by non-specific rules which may be advanced by contributory agencies. 2) The District has reviewed criterion 1 and believes the more appropriate evaluation criterion for provisions of critiques is criterion N-4. Therefore, note the RERP contains the specific commitment for conducting critiques. In addition, supporting procedures EPT-7 and EPT-10 ensure observer/evaluators participate in drills and exercises.	The District believes Section 'N' adequately addresses the planning standard, including the item noted in the report. During perpetual maintenance of emergency plan and procedures, the District will annually correct and revise actions based on review, planning, training, and exercise findings.	COMPLETE
Although Section 0.7 implies that all offsite response agencies receive training and are trained in basic fundamentals, the plan does not specifically indicate if the response groups listed in footnote 1, page 75, NUREG-0654, will receive the training and instruction noted in the footnote.	Section 0.7 of the RERP was designed to describe the provisions of footnote 1, page 75, NUREG-0654 rather than only a footnote reference. The Emergency Preparedness Training Program Section 4 contains the specific, detailed content of training provided to offsite Support Groups. Notification, basic radiation protection, communications and duties are the basic instruction topics.	The District will revise and correct the Plan and procedures annually based the result of reviews, training, planning and exercise actions.	COMPLETE

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
The plan does not state if erroneous performance by a trainee will receive on-the-spot correction by the drill instruction.	The Emergency Preparedness Training Program normally corrects erroneous trainee performance on-the-spot. However, the District has reviewed the Plan and procedures and did not identify this criterion in a specific statement.	A formal procedure change to the RERP will be initiated, processed, published and issued to ensure on the spot correction during drills.	ISSUE CHANGE 9/1/81
The Plan does not address the training of the licensee's headquarters support personnel.	The District has reviewed criterion 4 and identified section 0.6.2 <u>Recovery Organization</u> as the provision for headquarters support personnel training. The District concept is that the Recovery Organization is activated during the early stage of severe emergencies and not just a functional group reserved for long term recovery actions. Therefore, headquarters support is trained within the Recovery Organizations concept.	The District believes licensee headquarters support personnel training criteria is adequately provided in Section 0.6.2 and the emergency preparedness training program.	COMPLETE
No mention is made of training for persons responsible for the planning effort.	In the preparation of Section O for Training criteria, the District consolidated all training, including the training of those persons responsible for the planning effort. Therefore, Section 0.5.3 describes the training program of planning personnel in full conformance to Criterion P-1. The District has reviewed this placement again and continues to believe Section 0.5.3 is the proper location for this training commitment.	The District believes it adequately fulfills the criteria for training persons responsible for the planning effort.	COMPLETE
While the site representative to the total planning effort is identified, the corporate individual with	The RERP Section P-1 dated October 15, 1981 identifies the Radiological Health and Emergency Preparedness Manager as the person whose responsibility shall include the coordination of offsite planning efforts and implies this is a corporate function. However,	The District will revise Section P-1.0 and provide specific identification for the corporate individual with overall authority for radiological emergency	12/1/82

APPENDIX C (Continued)

ID	STEPS WHICH HAVE BEEN TAKEN	STEPS WHICH WILL BE TAKEN	SCHEDULE FOR COMPLETION
(Continued)			
overall authority for radiological emergency response planning is not specified.	the District has reviewed this description and agrees the statements can be more specific.	response planning.	
Although the presentation of the Plan is structured on the sixteen planning Standards, all of the relevant material for a given Standard is not necessarily contained within the section of the plan devoted to that Standard. Either more complete presentations within individual sections or cross-references should be provided.	The District implemented the initial NUREG-0654 criteria emergency plan on April 1, 1981. A complete revision into the sixteen planning standard structure was issued on October 5, 1981. The present Plan conforms closely to the outline form. Deviations were accepted only in several cases where the changes improved the operability of the Plan. The District knows of no deviations which reduce the effectiveness of emergency preparedness.	The District believes a cross-reference is not appropriate due to the small number of section deviations in the Plan. The District will continue to review the Plan on an annual frequency and provide appropriate corrective actions, including conformance to the planning standard, whenever either a deficiency or improvement is identified.	COMPLETE