

October 18, 1982

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD '82

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In the Matter of)
)
UNION ELECTRIC COMPANY) Docket No. STN 50-483 OL
)
(Callaway Plant, Unit 1))

APPLICANT'S OBJECTIONS TO FINAL
PARTICULARIZATION OF REED'S AMENDED
CONTENTIONS 1, 2 AND 3 DATED OCTOBER 1, 1982

In accordance with the schedule agreed upon by the parties and the Licensing Board during the September 8, 1982 prehearing conference, Applicant Union Electric Company herein submits its objections to the finalized contentions filed by intervenor John G. Reed on October 1, 1982. Applicant is objecting to only two of the twenty contentions now proposed by Mr. Reed, Contentions 11 and 12. With respect to both challenged contentions, Applicant essentially is renewing previously stated objections. See Applicant's Response to Final Particularization of Reed's Contentions 1, 2, and 3, dated July 14, 1982, at 25-26, 30-32.

Mr. Reed's proposed Contention 11 concerns emergency planning for reentry and recovery. (In Mr. Reed's previously filed proposed contentions, this issue was raised in Contentions 1(m) and 3(39).) In Mr. Reed's opinion, "[n]o specific plans for recovery or reentry have been developed by local governments as required by 10 C.F.R., Part 50, Section 50.47(b)(13)." Final Particularization of Reed's Amended Contentions 1, 2, and 3 ("Petition"), at 26. A review of

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the particular concerns raised in Contention 11 makes clear that Mr. Reed is seeking greater specificity than the Commission requires in local planning for recovery and reentry. In addition, Mr. Reed appears to reject the use of certain standard radiological criteria. See Petition at 27, Contention 11(B) (3). Applicant objects to Contention 11 because it lacks any legal or factual basis.

The regulation on which Contention 11 is based, 10 C.F.R. § 50.47(b) (13), expressly states the need for only "general" recovery and reentry plans, in contrast to the specific procedures which must be developed for the earlier phases of a radiological emergency. The absence of a need for detailed planning for reentry and recovery is appropriate in view of the objective of NRC's emergency preparedness requirements, namely, to protect the public against radiological hazards associated with an emergency at a nuclear power plant. As stated in NUREG-0654,^{1/}

The overall objective of emergency response plans is to provide dose savings (and in some cases immediate life saving) for a spectrum of accidents that could produce offsite doses in excess of Protective Action Guides (PAGs).

Once the radiological danger has passed, however, the Commission has no health and safety interest in assuring efficient recovery and reentry. Of course, defining the beginning of the reentry and recovery period is extremely important.

^{1/} See Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, NUREG-0654, Rev. 1, November, 1980 ("NUREG-0654") at 6, citing Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA-520/1-75-001, September, 1975, U.S. Environmental Protection Agency.

The four sets of Standard Operating Procedures for the local jurisdictions in the Callaway Plant EPZ include a reentry/recovery procedure, a copy of which is attached, which satisfies the recovery and reentry criteria of NUREG-0654, Planning Standard M. See also attached Section 12.0 of Callaway Offsite Emergency Response Plan. Mr. Reed complains about the absence of a time frame for radiological exposure. Petition at 26, Contention 11(A)(1). However, Attachment 14.1 of the Reentry/Recovery SOP provides that routine reentry cannot occur until radiation levels diminish to 0.25 mr/hr. An airborne radioactivity concentration limit (3×10^{-9} uCi/cc) and surface contamination limits (dpm/cm² and cpm above background) are also provided. For emergency workers, dose rate limits (independent of time) are provided in Attachment 14.3 of the Reentry/Recovery SOP. These limits are taken from the EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA-520/1-75-001, September, 1975, on which NUREG-0654's criteria are based. See n.1, supra.

Thus, precise radiological contamination limits are specified in the offsite procedures to ensure that emergency workers and the public do not endanger their health and safety by reentering an evacuated area before it is appropriate to do so. Mr. Reed provides no basis whatsoever for requiring "a basic ground contamination level," "a reentry time frame," or "a standard of acceptable radioactive contamination" beyond the contamination levels provided in the Reentry/Recovery

SOP. See Petition at 26-27, Contention 11(A)-(C).^{2/} Nor is there any regulatory basis for requiring further specification of ground decontamination provisions, reentry/recovery equipment, or unspecified "ambiguities" which, even if delayed for the reasons articulated by Mr. Reed, pose absolutely no health or safety hazard. See Petition at 27-28, Contentions 11(D)-(F). Applicant therefore asks the Board to reject proposed Contention 11, which fails to meet the basis requirement of 10 C.F.R. § 2.714(b).^{3/}

Applicant also objects to Mr. Reed's proposed Contention 12, concerning funding of local government emergency response capability. Petition at 28-31. Contention 12 is identical to Mr. Reed's original Contention No. 2, to which Applicant previously objected. See Applicant's Response to Final Particularization of Reed's Contentions 1, 2, and 3, dated July 14, 1982, at 30-32. For convenience, Applicant restates its prior objection.

^{2/} During his deposition, Mr. Reed advocated the use of a sliding scale delineating the specific reentry and recovery actions permitted at specified radiation levels. Tr. 166-171 (Reed). While Mr. Reed expressed concern in his deposition about the ability of local officials to function, given their lack of knowledge, without plans which provide the level of detail he advocates, Mr. Reed fails to consider the fact that local officials will rely heavily on recommendations and information from the State of Missouri Division of Health and Callaway Plant personnel. See SOP #14 at 5.3.2.

^{3/} ". . . [A]n intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention."

Duke Power Company, et al. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 N.R.C. ____ (August 19, 1982), slip op. at 13.

Proposed Contention 12 is outside the scope of this operating license proceeding. Applicant originally did not object to this contention because it appeared to address the issue of whether the local radiological emergency response plans will be capable of being implemented. See Applicant's Response to the Contentions Proposed by Intervenor John G. Reed, March 20, 1981, at 7-8. In this regard, Applicant distinguished this contention (formerly identified as Contention 4) from another Reed contention (Contention 2), which raised the funding issue. Id. at 4-6. Applicant objected to the latter contention as a challenge to the Commission's regulations. Id. Mr. Reed subsequently dropped the funding contention; hence, the Board did not have to rule on the matter.^{4/} See Special Prehearing Conference Order, April 21, 1981, at 6.

At this juncture, Mr. Reed has elaborated on his concern in proposed Contention 2 through the discussion he provides in his Petition at 28-31. Based on this discussion, it is clear that Mr. Reed does not seek to litigate, in Contention 12, specific ways in which he believes the plan cannot be implemented. Rather, the economic/political issue of who should pay for emergency planning efforts is the subject of proposed Contention 12. This is precisely the subject to which Applicant objected in its original response to Mr. Reed's proposed Contention 2. As we stated at that time, the issue of funding is not the subject of the Commission's

^{4/} The original Contention 4 was then renumbered as Contention 2.

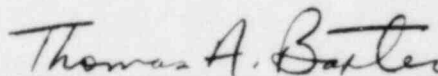
regulations on emergency planning, nor is it mentioned in NUREG-0654's numerous criteria. The general proposition that the offsite plans cannot be adequate without "full funding," Petition at 31, clearly goes beyond the Commission's regulations. As the Licensing Board stated in the TMI-1 restart proceeding:

[T]he matter of funding for emergency response, whether it be funding for the state, the counties or municipalities, appears to be a matter beyond the scope and the reach of the NRC's emergency planning regulations. Those regulations are directed toward assuring that adequate emergency preparedness provisions are in place and maintained, regardless of the source of funds required to provide adequate emergency preparedness. In its Statement of Consideration accompanying the new emergency planning rules, the Commission expressed its view that the question as to whether the NRC should or could require a utility to contribute to the expenses incurred by state and local governments in upgrading and maintaining their emergency planning and preparedness is beyond the scope of the new emergency planning rules. 45 Fed. Reg. 55402, 55408 (August 19, 1980).

Metropolitan Edison Company (Three Mile Island Nuclear Station Unit No. 1), LBP-81-59, 14 N.R.C. 1211, 1700 (1981). Applicant therefore believes Mr. Reed's proposed Contention 2 should now be rejected by the Board.

Respectfully submitted,

SHAW, PITTMAN, POTTS & TROWBRIDGE



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Dated: October 18, 1982

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CALLAWAY OFFSITE EMERGENCY
RESPONSE PLAN

CALLAWAY PLANT

JULY 1982

12.0 REENTRY AND RECOVERY

The planning and implementation of recovery efforts will vary according to the nature of the specific emergency situation. Recovery operations can be implemented over whatever time frame is appropriate. This allows for planning to contend with the actual conditions. The expertise and resources of State and Federal agencies will be requested to support the recovery effort.

The Bureau of Radiological Health and appropriate Federal agencies will be consulted for advice on terminating protective actions which will be considered following these guidelines:

- o The release of radioactive materials into the environment is under control or has ceased, the potential for further uncontrolled releases has ended; and Union Electric has determined that the Plant is in a stable condition.
- o Any residual radioactivity is not projected to exceed 1 to 5 rem for the general population or 25 rem for emergency workers. ..

Relaxation of protective measures will be based on a coordinated decision between Callaway, Gasconade, Osage, and Montgomery counties, and the City of Fulton. The decision will rely heavily on recommendations from the Bureau of Radiological Health and on information from Callaway Plant personnel concerning existing and potential conditions at the plant.

The Bureau of Radiological Health is responsible for recommending re-entry into evacuated areas or emergence from shelter. The Bureau of Radiological Health will notify the counties and State Emergency Management Agency of the time and nature of any required countermeasures. The State Emergency Management Agency will work with the counties and city in developing and issuing the appropriate instructions to the general public. Countermeasures will be directed by the Bureau of Radiological Health and will be executed by technicians or special teams which have been organized.

During the recovery period, the Bureau of Radiological Health will continue to serve as lead operational State response agency, in conjunction with the State Emergency Management Agency, which will continue to coordinate the support of State and Federal agencies.

Emergency Management Directors from the four respective counties and City of Fulton will cooperate with the Bureau of Radiological Health, Radiation Control Team and other agencies in order to minimize the radiation health hazard. County Sheriffs and City Police departments will continue to supervise area control and reentry to evacuated offsite areas, in accordance with technical advice from the Radiation Control Team.

The Department of Agriculture, in coordination with the Bureau of Radiological Health, will provide advice and guidance on the use and disposal of foods which may be contaminated.

The Department of Natural Resources, in conjunction with the Bureau of Radiological Health, will provide assistance in the monitoring of water for radioactive contamination and in the reclamation of water resources.

MONTGOMERY COUNTY
STANDARD OPERATING PROCEDURES

INDEX OF STANDARD OPERATING PROCEDURES (SOP's)

1. Direction and Control
2. Emergency Operations Center (EOC) Operation
3. Emergency Operating Facility/Forward Command Post Liaison
4. Notification
5. Alert/Warning
6. Public Information
7. Communications
8. Evacuation/Sheltering
9. Transportation
10. Law Enforcement/Security
11. Traffic Control
12. Fire/Rescue
13. Medical/Public Health
14. Reentry/Recovery
15. Training
16. Exercises and Drills
17. Logistical Support
18. Exposure Control
19. Reception and Care
20. Radiological Monitoring

MONTGOMERY COUNTY
REENTRY/RECOVERY

1.0 PURPOSE

- 1.1 This procedure provides guidelines to Montgomery County emergency response personnel for reentry into previously evacuated areas and for recovery actions to restore the areas as nearly as possible to their pre-emergency condition.
- 1.2 The individuals and/or agencies primarily affected by this procedure are: Presiding Judge/alternates, Sheriff's Office, County Clerk, Nursing Services and Public Information Officer.

2.0 REFERENCE

- 2.1 Callaway Offsite Emergency Response Plan
- 2.2 Missouri Nuclear Accident Plan

3.0 RESPONSIBILITIES

3.1. Montgomery County

3.1.1 Presiding Judge

- 1) Directs reentry/recovery efforts and coordinates recovery operations with Callaway County/Fulton, Osage and Gasconade counties and the cities.
- 2) Schedules and controls reentry.

3.1.2 Sheriff's Department

- 1) Continues security of evacuated areas.

3.1.3 Nursing Services

- 1) Continues to provide health and medical services to evacuees.

3.1.4 County Clerk

- 1) Coordinates transportation assistance.

3.1.5 Public Information Officer (PIO)

- 1) Coordinates news media conferences and public information.

3.2 State of Missouri

3.2.1 State Emergency Management Agency (SEMA)

- 1) Coordinates State and Federal response to requests for assistance from Montgomery County during the recovery phase.

3.2.2 Division of Health

- 1) Establishes criteria for recovery and reoccupancy of evacuated areas.
- 2) Ensures that reentry criteria have been met before reentry begins.

3.3 Federal

3.3.1 Nuclear Regulatory Commission (NRC)

- 1) Provides assistance, as requested by the State Emergency Management Agency.

3.3.2 Department of Energy (DOE)

- 1) Provides assistance, as requested by the State Emergency Management Agency.

3.3.3 Federal Emergency Management Agency (FEMA)

- 1) Provides assistance, as requested by the State Emergency Management Agency.

3.4 Union Electric (UE)

3.4.1 Notifies the Presiding Judge, through the Montgomery County Sheriff's Office dispatcher, that the emergency has shifted to a recovery phase.

3.4.2 Notifies the Presiding Judge, through the Montgomery County Sheriff's Office dispatcher, of any additional scheduled releases of radioactive material.

3.4.3 Coordinates recovery information with the Public Information Officer.

4.0 PRECAUTIONS

4.1 Routine reoccupancy of evacuated areas can begin when radiation and contamination levels in the areas diminish to occupancy standards (see Attachment 14.1, Page 14-9).

4.2 Earlier reoccupancy of an evacuated zone may be permitted on an individual case basis, as determined by the Presiding Judge and his staff, when the remaining radiation exposure risk is outweighed by the necessity for the person(s) to return to the area (for example, returning to provide crucial care for livestock).

4.3 If an area to be entered is suspected or known to be hazardous (for example, from airborne or significant surface contamination), reentry/recovery personnel should wear protective clothing and equipment.

5.0 PROCEDURE

5.1 Equipment and Supplies

5.1.1 See Attachment 14.2, Page 14-10.

5.2 Security

5.2.1 The Sheriff's Department, with necessary assistance from other law enforcement agencies, will provide continued security of evacuated areas and will restrict access to these areas to prevent unauthorized entry and vandalism.

5.3 Criteria for Termination of Protective Actions

5.3.1 The Presiding Judge, assisted by his staff, will determine when protective actions can be modified or discontinued, based on the following guidelines:

- 1) Releases from the plant to the environment must be under control or have ceased; the potential for further uncontrolled releases has ended; and Union Electric has terminated the emergency condition.
- 2) Surveys have shown that residual radioactivity, is within Federal regulations, Part 20 of 10CFR.

5.3.2 Relaxation of protective measures will be based on a collective, unified decision between Callaway County/ Fulton, Gasconade, Osage, and Montgomery counties and the cities and will rely heavily on recommendations and information from the Division of Health and Callaway Plant personnel.

5.4 Reentry

5.4.1 The Presiding Judge, assisted by his staff, will utilize all available data, including survey information and observations by personnel, to determine the following information:

- 1) Which area(s) is affected.
- 2) The conditions in the area(s), such as surface contamination levels.
- 3) Whether or not there are individuals in the area(s) who need assistance.
- 4) Whether or not it is possible to reduce potential hazards.
- 5) The time schedule, based on necessity, for reentry to commence.

5.4.2 The Presiding Judge, assisted by his staff, will dispatch initial reentry/recovery personnel, as necessary.

5.4.3 Initial personnel for reentry/recovery will be available from the National Guard.

5.4.4 The Presiding Judge, and his staff, will develop a plan of action for reentry and will brief reentry/recovery personnel on the plan, anticipated hazards, and any other useful information for reentry purposes. Actions to be executed may include the following:

- 1) Determine the nature and extent of the radiological conditions, physical damage, and any other potentially hazardous conditions.
- 2) Establish exclusion areas and access routes, as necessary.

- 5.4.5 Initial reentry/recovery personnel will obtain any required equipment, protective clothing, or respiratory protective equipment from emergency kits or other sources and will don the necessary protective equipment prior to beginning the reentry.
- 5.4.6 Initial reentry/recovery personnel will execute the reentry plan and will observe the precautions listed in Section 4.0.
- 5.4.7 Reentry/recovery personnel will maintain continuous radio contact with the Emergency Operations Center and will report the progress of the reentry and observed conditions.
- 5.4.8 Reentry/recovery personnel shall frequently check direct-reading dosimeters and withdraw to a safe area if assigned exposure limits are approached (see Attachment 14.3, Page 14-11). Personal records will be kept.
- 5.4.9 After completion of initial reentry operations, the Presiding Judge and his staff shall determine further actions to be implemented for the initiation of recovery operations.

5.5 Disaster Declaration

- 5.5.1 If local resources are insufficient for recovery efforts, the Presiding Judge may declare a local emergency. If the situation warrants, the Governor, at the request of local officials, may request a Presidential Disaster Declaration; thereby making the residents eligible for direct Federal assistance.

5.6 Recovery

- 5.6.1 The Presiding Judge and his staff will declare that an emergency situation is stable and has entered the recovery phase when the following guidelines, as applicable, are satisfied:
- 1) Radiation levels in all areas are stable and within guidelines set forth in 10CFR part 20 or are decreasing with time.
 - 2) Releases of radioactive material from the plant to the environment are under control or have ceased.
 - 3) Fire, flood, or similar emergencies are under control.
- 5.6.2 Recovery planning by the Presiding Judge and his staff will, according to the specific nature of the emergency, include an evaluation of the measures necessary to return an area to its pre-emergency condition.
- 5.6.3 Reoccupancy of an evacuated area can begin when radiation and contamination levels in the area diminish to occupancy standards (see Attachment 14.1, Page 14-9).
- 5.6.4 People returning to the area will be given instructions for any necessary radiological precautions.
- 5.6.5 Return by the general public will be conducted in stages to ensure safety and security.
- 5.6.6 Major efforts will be directed at prompt and permanent restoration of public and private property with assistance from the State and/or Union Electric.
- 5.6.7 The Presiding Judge and his staff will prepare a final summary report which describes the emergency, with recommendations for modifications of the local emergency response plan, as it was implemented.

5.7 Public Information

The Public Information Officer, in conjunction with all agencies participating in recovery operations, will coordinate news media conferences and public information released during the recovery phase.

5.8 Transportation

The County Clerk, will coordinate the dispatch of public transportation, as necessary, to provide for individuals and families-lacking transportation to return to their homes.

6.0 ATTACHMENTS

14.1 Criteria for Contamination Zones (Occupancy Standards)

14.2 Emergency Equipment and Supplies

14.3 Emergency Radiation Exposure Criteria

Attachment 14.1

CRITERIA FOR CONTAMINATION ZONES
(Occupancy Standards)

<u>Type of Radiation</u>	<u>Airborne Radioactivity Concentration ($\mu\text{Ci/cc}$)</u>
Beta - Gamma	3×10^{-9}

<u>Type of Radiation</u>	<u>External Radiation Levels Exposure Rate (mr/hr)</u>
Beta - Gamma	0.25

CRITERIA FOR BETA - GAMMA CONTAMINATION CLEARANCE

	<u>Removable</u>	<u>Fixed</u>
Skin Surface	- - - - -	1500 cpm above background
Clothing-Personal	- - - - -	1500 cpm above background
Clothing-Protective	- - - - -	6000 cpm above background
Equipment	1000 dpm/100 cm^2	1500 cpm above background

Attachment 14.2

EMERGENCY EQUIPMENT AND SUPPLIES

- 1) Telephones/Radios
- 2) Dosimeters
- 3) Respirators/Protective Clothing
- 4) Sector and zone maps
- 5) Logs and records

EMERGENCY RADIATION EXPOSURE CRITERIA FOR REENTRY AND RECOVERY

Dose	Emergency Exposure Criteria (Rem)	
	Protective Actions ^a	Lifesaving Actions ^b
Planned whole-body dose not to exceed	25	100
Planned dose to hands and forearms (including whole-body component) not to exceed	100	300
Thyroid	125	No Limit ^c

^aEntry to a hazardous area for protective actions, such as to control fires.

^bSearch and removal of injured persons or entry to prevent conditions that would probably injure numbers of people.

^cThyroid exposure should be minimized to the extent feasible by the use of respirators. However, no upper limit is specified for lifesaving action, since the complete loss of thyroid may be considered an acceptable risk for saving life.

Note:

1. Persons performing planned actions/rescues must be familiar with the health consequences of anticipated exposures of this magnitude.
2. Women of reproductive capacity should not take part.
3. Internal exposures should be minimized by use of respiratory protective equipment; skin contamination should be controlled by the use of protective clothing.
4. Personnel exposures approaching a significant fraction of these limits should be limited to once in a lifetime.