

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

AFFIDAVIT OF WALTER M. CLARK  
ON REED CONTENTION 20  
(AUTHORIZATION OF EXCESS EXPOSURES  
TO WORKERS & SPECIFICATION OF DECONTAMINATION ACTION LEVELS)

County of Callaway )  
State of Missouri ) ss.

WALTER M. CLARK, being duly sworn, deposes and says as follows:

1. I am the Emergency Management Director for Callaway County and the City of Fulton, Missouri. My business address is 510 Market Street, Fulton, Missouri 65251. A summary of my professional qualifications and experience is attached hereto as Exhibit "A". I have personal knowledge of the matters stated herein and believe them to be true and correct. I make

this affidavit in response to Reed Contention 20 (Authorization of Excess Exposures to Workers & Specification of Decontamination Action Levels).

2. The Callaway Plant, owned by Union Electric Company, is located in Callaway County, Missouri.

3. I perform the function of Emergency Management Director for Callaway County and the City of Fulton on a part-time basis. Since March 15, 1982, I have worked with Union Electric Company planners, Union Electric Company consultants, the State Emergency Management Agency and local agencies in the development of the Callaway County/Fulton Radiological Emergency Response Plan (the "Callaway/Fulton Plan").

4. In Contention 20, Mr. Reed raises two distinct allegations about off-site emergency planning for the Callaway Plant. First, he contends that a decision chain has not been established for authorizing emergency workers to be exposed to radiation in excess of the Environmental Protection Agency ("EPA") Protective Action Guides ("PAG's"). In addition, Mr. Reed says that action levels for the determination of the need for decontamination have not been specified. Each of these requirements are criteria contained in NUREG-0654, FEMA-REP-1, Rev. 1 (November, 1980), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." See NUREG-0654, Sections II.K.4 and II.K.5.a.

5. The purpose of this affidavit is to explain how the Callaway/Fulton Plan both establishes a decision chain for authorizing excess exposures to emergency workers and specifies action levels for the need for decontamination.

6. Authorizing excess exposures is a county function. Specifically, as set forth in Annex J of the Callaway/Fulton Plan, which pertains to Radiological Exposure Control, the County Court/Mayor is responsible for deciding whether to authorize radiological exposures in excess of the PAG's. Callaway/Fulton Plan at Annex J, Section I.A.3.b.

7. Consistent with the state PAG's, which are set forth in Annex B to the State Plan, the Callaway/Fulton Plan provides that the County/City precautionary exposure level for emergency workers is 5 rem projected whole body dose and 25 rem projected thyroid dose. Once this level is reached, all appropriate radiological exposure control measures will be implemented in order to keep exposures as low as reasonably achievable. Callaway/Fulton Plan, Annex J at Section III.E.1.

8. The Callaway/Fulton Plan also provides that the maximum exposure level for emergency workers, except in lifesaving situations, is 25 rem projected whole body dose and 125 rem projected thyroid dose. When this level is reached, the emergency worker must leave the risk area unless a lifesaving activity calls for exceeding this limit. Callaway/Fulton Plan, Annex J at Section III.E.2.

9. In determining whether to authorize exposures beyond 25 rem whole body dose for an emergency worker, the County Court/Mayor will consult with qualified technical personnel from the State of Missouri Bureau of Radiological Health ("BRH"). See Callaway/Fulton Plan, Annex J at Section III.E.3. BRH is responsible for directing operations specifically related to nuclear radiation affecting the environs outside the exclusion area of the Callaway Plant. State Plan, Annex A at BRH Section B. During a serious radiological emergency, BRH personnel will be located at the Emergency Operations Facility ("EOF") and, as well, may be situated at the State Emergency Operations Center ("EOC"). State Plan, Annex A at BRH Section C.3.b. At a minimum, the County Court/Mayor will have access to BRH through the county/city's representative at the EOF. Callaway/Fulton Plan, Annex C at Section II.C.3.e. Also, of course, there will be phone links between the County/City and BRH. State Plan, Annex A at BRH Section B.8; Callaway/Fulton Plan, Annex E at Section IV.

10. As stated in the Callaway/Fulton Plan, in the event excess exposures for emergency workers are determined to be necessary for lifesaving situations, the following criteria apply:

- a. emergency workers will be restricted to lifesaving missions and will be required to seek specific authorization to exceed this limit.

- b. The maximum radiological exposure control measures available will be afforded to the emergency workers.
- c. Emergency workers selected for the mission are volunteers and are fully advised of the potential risk.
- d. Exposure of emergency workers will not be considered beyond 75 rem projected whole body dose. No specific upper limit is established for thyroid exposure. In case of a lifesaving mission, the possible loss of a thyroid may be an acceptable risk in saving a life.

Callaway/Fulton Plan, Annex J at Section III.E.3.

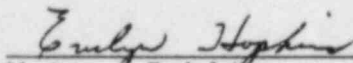
11. In summary, the Callaway/Fulton Plan, in conjunction with the State Plan, specifically delineates how and by whom the decision to authorize excess exposures for County/City emergency workers will be made. As the Emergency Management Director for Callaway County/Fulton, I am satisfied that this planning need, set forth in Section II.k.4 of NUREG-0654, has been satisfactorily met.

12. Decontamination activities will take place under the direction of BRH. Callaway/Fulton Plan, Annex B, at Section III.C.2.j. The Callaway/Fulton Plan specifically provides: "The exposure rate action level requiring decontamination is defined as 0.5 mR per hour above background for persons, and 3 mR per hour above background for vehicles, equipment, and supplies." Callaway/Fulton Plan, Annex J at Section III.D.1. These action levels for the public, emergency workers, vehicles

and equipment also are specified in the State Plan. See State Plan, Annex D, Attachment 6 concerning Decontamination Procedures, at Section A.4. Accordingly, I am satisfied that the concern expressed by Mr. Reed in Contention 20 about specifying decontamination action levels is fully satisfied.

  
Walter M. Clark

Subscribed and sworn to before me  
this 18<sup>th</sup> day of May, 1983.

  
Notary Public

My Commission expires 1/19/87.

EVELYN HOPKINS  
NOTARY PUBLIC STATE OF MO.  
MY COMMISSION EXPIRES  
JANUARY 19, 1987  
CALLAWAY COUNTY

WALTER M. CLARK  
Qualifications & Experience

Twenty four (24) years of employment with the State Emergency Management Agency and fifteen months (15) as Director of the Callaway County/Fulton Emergency Management Agency.

Started employment with Missouri Civil Defense Agency in November 1955. The name was later changed to Disaster Planning and Operations, Civil Defense and more recently changed to State Emergency Management Agency.

My first staff position title was Service Chief. Responsibilities included coordination of several programs including local emergency plan development, police reserve training, federal surplus property coordinator, and editor of monthly newsletter.

From 1962 to 1975 I held various positions in the state office including:

Chief, Resources Management Division  
Plans and Operations Officer  
Community Shelter Planning Officer

All required providing assistance in the development of state and local emergency operations plans and frequent public speaking. During disasters in the state I usually was delegated the additional duty of Disaster Coordinator for the office.

From December 1974 to January 1976 I was self-employed as a Governmental Programs Consultant, assisting counties, cities, and other units of local government with federally funded projects.

January 1976 to January 1981 - Rejoined the SEMA office and held the following positions:

Administrative Assistant  
Nuclear Civil Protection Planner  
Deputy Director

March 15, 1982 to present - Part time Emergency Management Director for Callaway County and City of Fulton

January 1, 1981 to present - Self-employed consultant

Professional Training

Law Enforcement - University of Missouri  
Resources Management - DCPA Staff College  
Radiological Instructor - University of Missouri  
Community Shelter Planning - DCPA Staff College  
Fallout Shelter Analysis - DCPA Staff College

Served on Callaway County R-III Board of Education for 11 years, 5 of which as President of Board. Developed the schools first "Board Policies Handbook" and "School Emergency Plan."