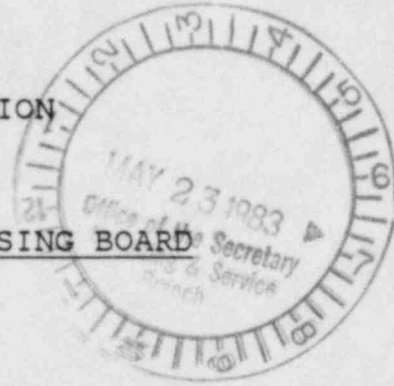


UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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 JOHN W. BAER
ON REED CONTENTION 4
(EMERGENCY ACTION LEVEL SCHEME/WORKER NOTIFICATION)

County of Dauphin)
Commonwealth of Pennsylvania) ss.

JOHN W. BAER, being duly sworn, deposes and says as follows:

1. I am an emergency planning specialist with the Emergency Planning Department of Energy Consultants, Inc., which provides nuclear emergency planning services to utilities, industry, state and local governments. My business address is 2101 North Front Street, Harrisburg, Pennsylvania 17110. I have reviewed the Missouri Nuclear Accident Plan - Callaway ("State Plan") and the local offsite radiological emergency response plans for the Callaway Plant. In 1983 I

have been assigned to Union Electric Company to assist in the revision of state and local offsite plans to meet the technical comments provided from the FEMA review to date. A summary of my professional qualifications and experience is attached hereto as Exhibit "A".

2. This affidavit responds to Reed Contention 4. The contention raises two separate issues. They are:

- a. The offsite plans do not include an emergency classification level scheme that would indicate what emergency actions are to be taken at a given emergency classification.
- b. The offsite plans do not specify when and how emergency response personnel are to be notified and mobilized at a given emergency classification level, and they do not provide sufficient detail as to what emergency personnel are expected to do at a given emergency classification level.

I have personal knowledge of the matters stated herein and believe them to be true and correct.

3. NRC emergency planning standards contained in 10 C.F.R. sections 50.47(b)(4) and 50.47(b)(5) are cited in support of the contention. The applicable language of section 50.47(b)(4) requires that "A standard emergency classification and action level scheme... is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determination

of minimum initial offsite response measures." The applicable language of Section 50.47(b)(5) requires that "Procedures have been established...for notification of emergency personnel by all organizations."

4. NUREG-0654 planning criterion D.3 provides, "Each state and local organization shall establish an emergency classification and emergency action level scheme consistent with that established by the facility licensee."

5. NUREG-0654 planning criterion D.4 provides, "Each state and local organization should have procedures in place that provide for emergency actions to be taken which are consistent with the emergency actions recommended by the nuclear facility licensee, taking into account off-site conditions that exist at the time of the emergency."

6. NUREG-0654 planning criterion E.2 provides, "Each organization shall establish procedures for alerting, notifying, and mobilizing emergency response personnel."

Emergency Action Level Scheme

7. ANNEX C of the local radiological emergency response plans establishes an emergency classification system that is consistent with the emergency action level scheme of the Callaway Plant. ANNEX C defines the emergency classification levels and delineates the emergency functions to be performed at each emergency classification level. The defined offsite emergency functions are consistent with those suggested by

Appendix 1 of NUREG-0654. ANNEX C establishes the timing for the emergency response, and determines when specific emergency functions will be implemented.

8. The other ANNEXES to the local plans establish concepts of operation and assign organizational responsibilities for each of the emergency functions delineated in ANNEX C. Specific actions to be taken by emergency personnel at any emergency classification level will be detailed in implementing procedures to be contained in Appendix 3 to the local plans. The procedures will be structured by emergency classification levels consistent with ANNEX C of the plans, and will specify how and by whom emergency functions are to be carried out at a given emergency classification level. Training of offsite emergency workers in their respective emergency tasks will be based on the implementing procedures.

Emergency Worker Notification

9. ANNEX D of the local radiological emergency response plans establishes methods of emergency worker notification. ANNEX D provides that the Callaway/Fulton Emergency Communications Center (ECC) dispatcher will receive initial notification of an emergency classification declared at the Callaway Plant. The ECC dispatcher will then relay the notification to Sheriff's dispatchers of other risk counties. According to their respective notification procedures, the dispatchers will initiate calls to designated emergency

personnel of each emergency response agency. (Illustration of the notification procedure is attached as Exhibit "B".) The call out sequence will be organized in the notification implementing procedure by emergency classification level. The procedure will include primary and alternate emergency contact persons for each response agency along with emergency telephone numbers.

10. ANNEX D provides that designated county/city emergency personnel in each response agency will notify and will mobilize augmentation personnel and resources as they are needed to perform specific emergency functions. Implementing procedures will contain resource lists specifying resources that are available to support emergency functions. The designated emergency personnel of each response agency will determine what tasks need to be performed according to the implementing procedures and will assign personnel to duty stations as they are required.

11. Implementing procedures and emergency worker training will inform emergency workers of emergency actions that are required in addition to normal and routine duties. These actions include such things as acquisition and use of personal dosimetry, the recording of dosimetry readings, decontamination procedures, and other actions beyond those normally performed by the emergency worker.

Conclusions

12. The emergency action level and emergency worker notification provisions of the local offsite plans contain a sufficient level of detail to comply with NRC planning standards in 10 C.F.R. section 50.47 and with the planning criteria of NUREG-0654.

13. The purpose of the offsite plans is to provide a concept of operations. The concept of operations in the plans establishes the emergency organizational structure, the mechanism for direction and control of emergency response actions, and the emergency functions that are required. The plans clearly explain the responsibilities of the local offsite emergency response organization, and the plans should be sufficiently broad in nature so as to be applicable to a wide spectrum of accident scenarios.

14. The emergency classification scheme established in the local plans conforms to NUREG-0654, Appendix 1 specifications. This classification scheme will determine the timing of local offsite emergency response actions and will determine the level to which the offsite emergency organization will be mobilized.

15. The plans need not, and should not, contain a large volume of detail concerning how each specific emergency task will be undertaken by emergency workers. Such level of detail would obscure organizational concepts of operations, would

cause the plans to become riddled with inaccessible details that are more appropriate for implementing procedures, and would render the plans virtually unuseable. As the FEMA guidance states on the form and content of plans: "The plans should be kept as concise as possible. The average plan should consist of perhaps hundreds of pages, not thousands."

NUREG-0654 at 29.

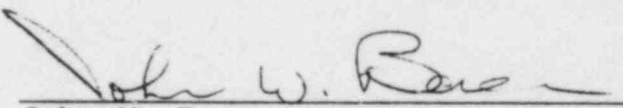
16. Details pertaining to emergency worker tasks will be contained in implementing procedures which specify how an emergency function will be performed, when it will be performed by emergency classification level, and by whom it will be performed. The implementing procedures will be specific to emergency functions, allowing the operational details to be succinctly explained and readily accessed.

17. Many of the tasks to be performed by support emergency personnel are routine tasks which they perform in their normal work (ambulance drivers, bus drivers, tow truck operators, rescue personnel, public works employees, etc.). Plans and procedures need not detail how these functions will be performed in an emergency. Emergency worker actions that are specific to the emergency (in particular, radiological exposure controls) are provided for in the plan, will be supported by implementing procedures, and will be the responsibility of emergency response supervisors to ensure proper implementation.

18. Training for emergency response personnel will be based on the plans and implementing procedures. This training will explain to emergency workers what they are expected to do, where they are expected to do it, when and how they will be notified, and how they are to implement radiological exposure control measures and other emergency actions which are not routine aspects of their normal work functions. An extreme level of detail in the plans themselves, as Mr. Reed apparently seeks, is not a substitute for effective training.

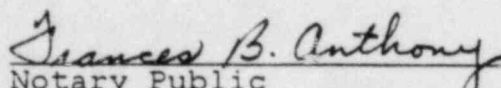
Summary

19. In my judgment, the emergency classifications system and worker notification provisions contained in the local offsite plans for the Callaway Plant reflect sound operational concepts, and meet NRC regulations and NUREG-0654 planning requirements. The development of functional implementing procedures and proper training of emergency workers are key elements that will determine efficient implementation of the emergency response plans.



John W. Baer

Subscribed and sworn to before me
this 13th day of May, 1983.



Notary Public

NOTARY PUBLIC

My Commission Expires September 25, 1983

My Commission Expires Dauphin County

John W. Baer

Education

- 1970 Graduate Level Study
American University
Washington, D.C.
- 1966 Bachelor of Science - Political Science
Western Maryland College
Westminster, Maryland

Experience

- 1981 to Present Energy Consultants, Inc.
Harrisburg, Pennsylvania

Planning/Training Specialist. Develop On-Site Radiological Emergency Response Plan for Arizona Public Service Company, Phoenix, Arizona. Assist with development of Off-Site Radiological Emergency Response Plans for State and local governments. Developed and sought agreements for Louisiana State Agency emergency procedures in support of the Louisiana Power and Light Company's Waterford 3 Nuclear Power Station. Development of lesson plans for training of State, county and local personnel in support of Radiological Emergency Response Plans. Assisted with development of lesson plans for offsite emergency response training for Rochester Gas and Electric and Louisiana Power and Light. Conduct training of State, county and local emergency response personnel in support of Radiological Emergency Response Plans.

- 1978 to 1980 Southcentral Regional Planning Council
Harrisburg, Pennsylvania

Director. Directed an eight county planning and evaluation program for the Commonwealth of Pennsylvania. Assisted local communities and governments in planning and development of communications systems and automated information systems for use in criminal justice system and in support of emergency response organizations. Developed and revised training courses in Data Analysis for use by Planning and Operational

personnel at the State and local government level. Assisted with delivery of six thirty-five hour training sessions for Criminal Justice personnel from a ten State region. Developed and conducted practical group exercises for course participants.

1973 to 1978

Southcentral Regional Planning Council
Harrisburg, Pennsylvania

Planner. Assisted local communities and governments in planning and development of a range of Criminal Justice Programs and of Criminal Justice System Communications and Automated Information Systems.

1971 to 1973

Lord Fairfax Planning District Commission
Front Royal, Virginia

Planner. Performed general planning tasks, including Criminal Justice and Emergency Response Planning for a five county region of Northern Virginia.

1966 to 1968

U.S. Department of Defense
Fort Meade, Maryland

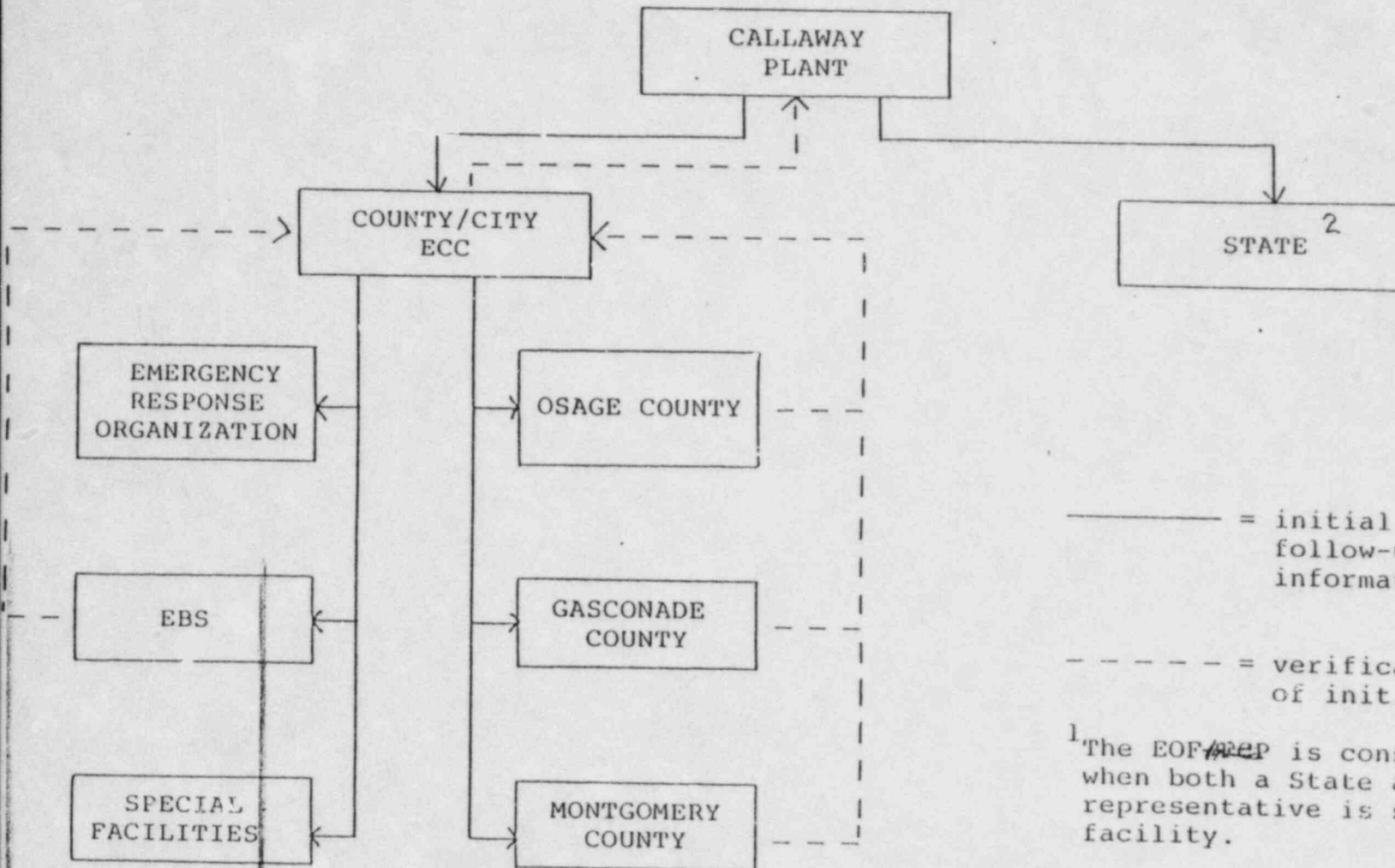
Security Specialist.

ATTACHMENT 1

ANNEX D

INITIAL AND FOLLOW-UP NOTIFICATION/INFORMATION BLOCK DIAGRAM
(PRIOR TO MANNING OF EOF/~~REP~~)

1



———— = initial notification and follow-up notification/information

- - - - - = verification of authenticity of initial notification

¹The EOF/~~REP~~ is considered to be manned when both a State and County/City representative is stationed at the facility.

²The State will confirm initial notification of risk counties and provide State follow-up information.

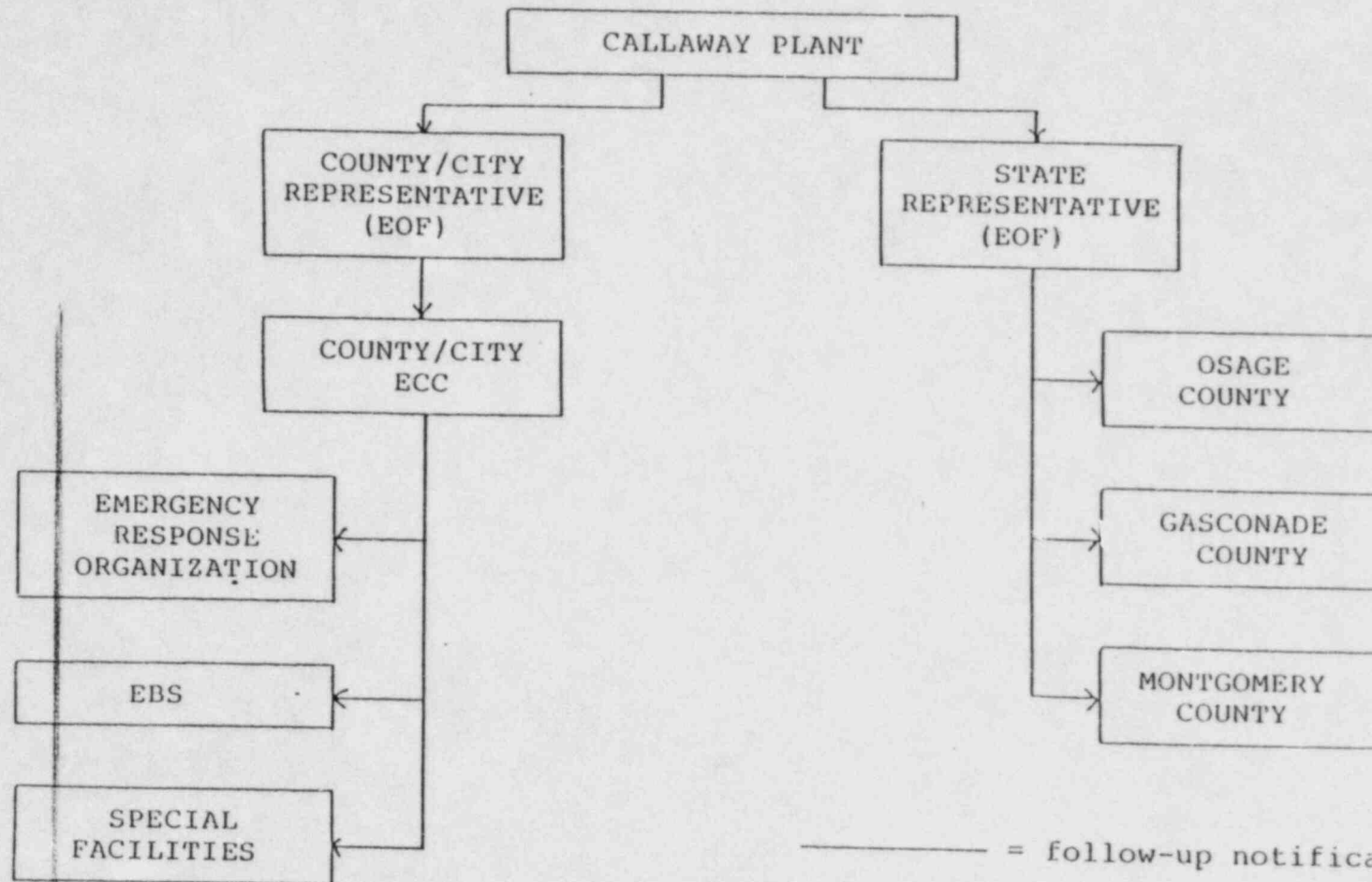
Exhibit B

ATTACHMENT 2

ANNEX D

FOLLOW-UP NOTIFICATION/INFORMATION BLOCK DIAGRAM

(AFTER MANNING OF EOF/FCP¹)



———— = follow-up notification/information

¹The EOF/FCP is considered to be manned when both a State and County/City representative is stationed at the facility.