

November 8, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CAROLINA POWER AND LIGHT COMPANY AND
NORTH CAROLINA EASTERN MUNICIPAL
POWER AGENCY

(Shearon Harris Nuclear Power Plant
Units 1 and 2)

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Docket Nos. 50-400-OL
50-401-OL

AFFIDAVIT OF GERALD E. SIMONDS IN SUPPORT OF NRC STAFF'S
RESPONSE TO APPLICANTS' MOTION FOR SUMMARY DISPOSITION
OF EDDLEMAN CONTENTIONS 144 & 154

I, Gerald E. Simonds, being duly sworn do depose and state:

1. I am employed by the U.S. Nuclear Regulatory Commission in the Office of Inspection and Enforcement, Division of Emergency Preparedness and Engineering Response, Emergency Preparedness Branch (EPB). My professional qualifications are attached as Attachment 1. I am a technical reviewer for the Shearon Harris Nuclear Power Plant (SHNPP), and am responsible for assessing the adequacy of onsite radiological emergency plans and preparedness. I have personal knowledge of the matters set forth herein and the statements made are true and correct to the best of my knowledge, information, and belief. I have prepared this Affidavit in response to the Applicants' October 8, 1984 Motions for Summary Disposition of Eddleman Contentions No. 144 and 154.

2. I have reviewed the Applicants' Motions and their supporting papers and the SHNPP Emergency Plan.

3. Eddleman Contention 144 states:

CP&L's emergency personnel levels do not meet the requirements of NUREG-0737, Rev. 1, Table 2. [We assume that Intervenor is referring to Supplement 1 to NUREG-0737].

4. In Revision 2 to the SHNPP Emergency Plan, submitted in February 1984, Applicants revised their Table 2.2-1 for minimum onshift staffing and augmentation in the event of an emergency. Applicants' Table 2.2-1 now corresponds closely with Table B-1 of NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants", November 1980. NUREG-0654 has been endorsed by Reg. Guide 1.101 Revision 1, and has the same status as a Regulatory Guide. A footnote to Table 2 of NUREG-0737, Supplement 1, cites NUREG-0654 as the source for Table 2. Table 2 of NUREG-0737, Supplement 1, is therefore identical with Table B-1 of NUREG-0654 with the exception that Table 2 of NUREG-0737, Supplement 1, contains a typographical error. Table 2 specifies one (1) more Electrical Maintenance/Instrument and Control (I&C) Technician than is specified in Table B-1.

Item by item comparison of Table 2.2-1 with Table B-1 shows that at least in one area, Applicants have designated more personnel than the minimum required. Applicants' Emergency Plan designates two people for Emergency Direction & Control whereas Table B-1 requires only 1. In the other

areas Applicants' Table 2.2-1 designates the same number of personnel as specified in Table B-1. Both Table 2.2-1 and Table B-1 are attached as attachments 2 and 3 respectively. Further, Generic Letter No. 82-33 that forwarded NUREG-0737, Supplement 1, to licensees and applicants, states that staffing levels per Table 2 are goals, not strict requirements. Reasonable exceptions to goals for the number of additional staff personnel and response times for their arrival are considered by the NRC staff. (See also NUREG-0737, Supplement 1, Section 8.4.1.i, p.23). Section 2.2.2 of the Emergency Plan includes Applicants' commitment to the range of augmentation times, viz., 30-45 minutes and 60-75 minutes and PEP-321 describes the procedures for prompt notification of emergency personnel following declaration of an emergency. In our view, the staffing goals of NUREG-0654, Table B-1 (and, therefore, Table 2 of NUREG-0737, Supplement 1) have been met.

5. Eddleman Contention 154 states that:

Plant operators are assigned to make the dose assessments (See Table 2.2.3 page 2). These personnel are unqualified to make the detailed judgements that may be required by the procedures for dose estimating, given in Annex B of the SEP (Site Emergency Plan).

6. The Applicants' Emergency Plan (EP) assigns the initial responsibility to control room personnel to: (1) determine when an Emergency Action Level (EAL) has been met or exceeded, (2) declare an emergency, (3) recommend protective actions to the offsite governmental authorities,

and (4) make dose projections (SHNPP EP Rev 3, September 1984, Section 2.4.). These control room personnel will be assisted in these matters by the Dose Projection Teams upon activation of the Technical Support Center. The emergency plan commits to providing training of control room personnel and other individuals who may be called on to assist in an emergency.

Provisions for initial training and annual retraining are contained in the Emergency Plan Section 5.2.1 and Plant Emergency Procedure PEP-403. Section 5.2.1 of the plan specifies that the specific emergency response task training is described in the lesson plans and study guides prepared for each emergency position. As discussed therein, training is provided in (inter alia): emergency classifications and EALs, dose projection procedures and protective action recommendation for the public. Dose projections are made per procedures PEP-341, PEP-342, and PEP-343 (Annex B of the plan contains the technical background and justification for these procedures, but is not used in making actual dose projections).

7. Section 5.3 of the Applicants' plan provides for periodic drills and exercises to include the objectives described in PEP 406 and Corporate Emergency Plan Implementing Procedure CEPIP-18, viz: to test the adequacy of emergency preparedness at SHNPP, to ensure that emergency personnel are familiar with assignments and proficient in performing their duties, to demonstrate proficiency in recognizing, assessing, and classifying the emergency condition, to employ corrective measures, and to demonstrate the adequacy of protective measures considered and used to protect personnel, both onsite and offsite.

8. The familiarity and proficiency of the plant operators exhibited during the pre-licensing drills and exercises will be observed and critiqued by qualified observers from the utility and by NRC inspectors. Procedure PEP-406 provides that any weaknesses in the Emergency Plan and in training that are identified through the critique process shall be documented and corrected by the organizations and individuals who have responsibility for the areas identified.

9. Based upon the above, I believe that there is reasonable assurance that Control Room personnel assigned the responsibility for dose projections are (or will be, following completion of the specified training and drills) suitably proficient to perform their functions, and that the dose assessments will be properly made.

10. Based on the foregoing, I support the Applicants' Motion and find that there is no merit to Eddleman Contentions No. 144 and 154.

Gerald E. Simonds
Gerald E. Simonds

Subscribed and sworn to before me
this 8th day of November, 1984

Eduardo S. Becker
Notary Public

My commission expires: 7/1/86

STATEMENT OF PROFESSIONAL QUALIFICATIONS
OF GERALD E. SIMONDS

I received a B.S. in Physics from the University of Detroit in 1952 and a M.S. in Mechanical Engineering from the Florida Institute of Technology in 1972. I completed the Naval Nuclear Ship Superintendents School at Puget Sound Naval Shipyard in 1975. This eight-week intensive course covering nuclear reactor principals and practices is given to all Repair Superintendents responsible for repair and overhaul of Naval Nuclear ships. I joined the NRC in October 1981 as a Physical Scientist, Emergency Preparedness Specialist, in the Emergency Preparedness Branch, Division of Emergency Preparedness and Engineering Response. Since joining the NRC, I have successfully completed the Pressurized Water Reactor Technology Course and the Boiling Water Reactor Technology Course at the NRC Reactor Training Center in Chattanooga, Tennessee.

As an Emergency Preparedness Specialist, my responsibilities include review of the emergency preparedness plans for several nuclear power plants, including Shearon Harris Nuclear Power Plant. This includes review of both onsite and offsite emergency planning. In addition, I have participated in onsite emergency preparedness appraisals and emergency exercises as a team member at several sites. In this context, I have conducted onsite checks of emergency equipment and facilities, notification systems, personnel training and performance, procedures and interfaces with offsite agencies and the training of their personnel.

TABLE 2.2-1
ON-SHIFT STAFFING FOR EMERGENCIES

NUREG 0737, Supplement 1 <u>Emergency Function</u>	<u>Emergency Positions</u>	<u>Job Category</u>	<u>Minimum Shift Size</u>	<u>Capability for Additions</u>	
				<u>30-45 min</u>	<u>60-75 min</u>
1. Emergency Direction & Control	Site Emergency Coordinator (SEC)	Shift Foreman	1	--	--
		Plant General Mgr. (or alternate)	--	--	1
2. Plant Operations and Accident Assessment	Operations Leader	Shift Foreman (SRO)	1	--	--
		Senior Control Operator (SCO)	1	--	--
	Operations Team	Control Operators	2	--	--
		Auxiliary Operators	2	--	--
3. Notification/Communication	Emergency Communicator	Available Auxiliary Operator	1	1	--
		Regulatory Compliance Specialist	--	--	2
4. Radiological Assessment	Emergency Response Manager	Vice President (or alternate)	--	--	1
	Dose Assessment Team Leader	Project Specialist, Radiation Control (or alternate)	--	1	--
	Environmental Monitoring Team Personnel	E&C Technicians	--	3	3

TABLE 2.2-1 (CONT'D)
ON-SHIFT STAFFING FOR EMERGENCIES

NUREG 0737 Supplement 1 <u>Emergency Function</u>	<u>Emergency Positions</u>	<u>Job Category</u>	<u>Minimum Shift Size</u>	<u>Capability for Additions</u>	
				<u>30-45 min</u>	<u>60-75 min</u>
4. (Cont'd)	Plant Monitoring Team Personnel (Surveys)	Radiation Control Technicians	1	1	1
	Plant Monitoring Team Personnel (Chemistry)	E&C Technicians	1	--	1
5. Plant Engineering, Repair and Corrective Actions	Accident Assessment Team	Shift Technical Advisor	1	--	--
		Other Engineering Disciplines	--	1	2
	Damage Control Team Personnel	Mechanical Maintenance	1*	--	2
		Electrical/I&C Maintenance	1*	2	1
6. Protective Actions	Personnel Protection & Decontamination	Radiation Control Technicians	2*	2	2
7. First Aid and Rescue	First Aid Team	Fire Protection Technical Aid	1*	Local Support	
		Other Trained Personnel	1*	Local Support	

**TABLE 2.2-1 (CONT'D)
ON-SHIFT STAFFING FOR EMERGENCIES**

NUREG 0737 Supplement 1 <u>Emergency Function</u>	<u>Emergency Positions</u>	<u>Job Category</u>	<u>Minimum Shift Size</u>	<u>Capability for Additions</u>	
				<u>30-45 min</u>	<u>60-75 min</u>
8. Fire Fighting	Fire Brigade	--	Fire Brigade per Technical Specifications	Local Support	
9. Site Access Control	Security Team	Security Personnel	Per Security Plan		
TOTAL			10	11	16

Note: *May be provided by personnel assigned other functions.

Table B-1

MINIMUM STAFFING REQUIREMENTS FOR NRC LICENSEES
FOR NUCLEAR POWER PLANT EMERGENCIES (See B.5.)

Major Functional Area	Location	Major Tasks	Position Title or Expertise	On Shift*	Capability for Additions	
					30 min	60 min
Plant Operations and Assessment of Operational Aspects			Shift Supervisor (SRO)	1	--	--
			Shift Foreman (SRO)	1	--	--
			Control Room Operators	2	--	--
			Auxiliary Operators	2	--	--
Emergency Direction and Control (Emergency Coordinator)***			Shift Technical Advisor, Shift Supervisor or designated facility manager	1**	--	--
Notification/ Communication****		Notify licensee, State local and Federal personnel & maintain communication		1	1	2
Radiological Accident Assessment and Support of Operational Accident Assessment		Emergency Operations Facility (EOF) Director	Senior Manager	--	--	1
		Offsite Dose Assessment	Senior Health Physics (HP) Expertise		1	--
		Offsite Surveys		--	2	2
		Onsite (out-of-plant)		--	1	1
		In-plant surveys	HP Technicians	1	1	1
		Chemistry/Radio- chemistry	Rad/Chem Technicians	1	--	1
Plant System Engineering, Repair and Corrective Actions		Technical Support	Shift Technical Advisor	1	--	--
			Core/Thermal Hydraulics	--	1	
			Electrical	--	1	1
			Mechanical	--	--	1
		Repair and Corrective Actions	Mechanical Maintenance/ Rad Waste Operator	1**	--	1
			Electrical Maintenance/ Instrument and Control (I&C) Technician	1**	1	1
				--	1	--

Table B-1 (contd)

Major Functional Area	Major Tasks	Position Title or Expertise	On Shift*	Capability for 30 min	Additions 60 min
Protective Actions (In-Plant)	Radiation Protection:	HP Technicians	2**	2	2
	a. Access Control				
	b. HP Coverage for repair, corrective actions, search and rescue first-aid & firefighting				
	c. Personnel monitoring				
	d. Dosimetry				
Firefighting	--	--	Fire Brigade per Technical Specifications	Local Support	
Rescue Operations and First-Aid	--	--	2**	Local Support	
Site Access Control and Personnel Accountability	Security, firefighting communications, personnel accountability	Security Personnel	All per Security plan		
		Total	10	11	15

Notes:

- * For each unaffected nuclear unit in operation, maintain at least one shift foreman, one control room operator and one auxiliary operator except that units sharing a control room may share a shift foreman if all functions are covered.
- ** May be provided by shift personnel assigned other functions.
- *** Overall direction of facility response to be assumed by EOF director when all centers are fully manned. Director of minute-to-minute facility operations remains with senior manager in technical support center or control room.
- **** May be performed by engineering aide to shift supervisor.

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(Shearon Harris Nuclear Power Plant,)
Units 1 and 2))

Docket Nos. 50-400 OL
50-401 OL

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE IN SUPPORT OF APPLICANTS' MOTIONS FOR SUMMARY DISPOSITION OF EDDLEMAN CONTENTION-144 and 154"; AND "AFFIDAVIT OF GERALD F. SIMONDS IN SUPPORT OF NRC STAFF'S RESPONSE TO APPLICANTS' MOTION FOR SUMMARY DISPOSITION OF EDDLEMAN CONTENTIONS 144 & 154" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system (*), this 8th day of November, 1984.

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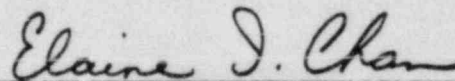
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