

May 9, 1984

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DOCKETED

In the Matter of )

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

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

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

APPLICANTS' STATEMENT OF MATERIAL FACTS AS  
TO WHICH THERE IS NO GENUINE ISSUE TO BE HEARD  
ON WELLS EDDLEMAN'S CONTENTION 132C(II)

Pursuant to 10 C.F.R. § 2.749(a), Applicants state, in support of their motion for summary disposition of Wells Eddleman's Contention 132C(II) in this proceeding, that there is no genuine issue to be heard with respect to the following facts:

1. The Atomic Safety and Licensing Board has characterized Eddleman Contention 132C(II) as identifying "possible problems in the layout of the [Shearon Harris Nuclear Power Plant (SHNPP)] control room." Memorandum and Order (Ruling on Wells Eddleman's Proposed Contentions Concerning Detailed Control Room Design Review (DCRDR), Richard Wilson's Motion to Withdraw Contentions, and the Conservation Council of North Carolina's Motion to Withdraw Contentions) at 8, dated October 6, 1983.

2. Eddleman Contention 132C(II) asserts that certain control and display cabinets "block or impede" the view of others such that "operator inability to see, read accurately, or integrate the information on these panels can imperil public safety in an accident." Id.

3. The configuration of the SHNPP control room was determined after thorough human factors analysis to design a layout that assures operator maintenance of public safety. Affidavit of Robert W. Prunty, Jr. ("Prunty Affidavit") at 2.

4. From April 1980 to January 1981, a comprehensive human factors review of the SHNPP control room was conducted by CP&L, Ebasco Services Inc. (Architect-Engineer), Westinghouse

Corporation (Nuclear Steam Supply Vendor), and Essex Corporation (Human Factor Consultants). The primary source of criteria used during the review was NUREG/CR-1580. Prunty Affidavit at 2.

5. As a result of the human factors review, layout of the SHNPP control room was rearranged to reflect the recommendations contained therein. Prunty Affidavit at 2; "Human Factors Design Evaluation Report for the Shearon Harris Unit 1 Control Room" (hereinafter "DCRDR"), January 23, 1981, at Appendix D.

6. For purposes of the evaluation and safe operation of the control room, three operator positions were chosen where, at each position, the operators would be in closest proximity to Reactor Controls, Emergency Safeguards Controls, and Emergency Power Controls and Displays, while at the same time they would be provided with the optimum viewing angles of all control panels in the rooms. Prunty Affidavit at 2-3.

7. The layout of the control room, including the three operator positions described above, are illustrated in Exhibit 3 to the Prunty Affidavit. Control panel descriptions are contained in Exhibit 2 to the Prunty Affidavit.

8. At any operating nuclear power plant, it is required that a minimum of two licensed operators, including a senior operator, be in the control room at all times. 10 § C.F.R. 50.54(m)(2)(i) and (iii).

9. Of the operators on duty in the control room, at least one must be at the controls at all times, 10 C.F.R. § 50.54(m)(2)(iii). One of the operators is expected to work at the operator desk much of the time. Prunty Affidavit at 2.

10. Panels 8, 9, 10, and 11 are obscured by panels 12, 13, 14, and 15 (as alleged in the contention) only if an operator is standing at panels 1 through 5 or at panels 6 through 7. Id. at 3. This position is not a typical position for one of the operators to remain in. Id. at 4. Should one of the operators be in this position, then the other operator(s) would have a commanding view of panels 8 through 11 if needed. Id.

11. Control panels 6 and 7 are located behind panels 1 through 5 (as alleged in the contention). Id. Panel 7 (Condensate Booster Hydraulic Coupling) has no controls or displays

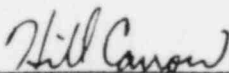
and does not require observation. Id.; DCRDR, Appendix D, at 5 and 11. Panel 6 (Cooling Tower and River Water Make-Up Control) has few controls and requires little, if any, monitoring at all. Prunty Affidavit at 4; DCRDR, Appendix D, at 5 and 11. Neither of these panels is safety related nor required to be operated in an accident scenario. Prunty Affidavit at 4.

12. If an operator is in a position standing in the vicinity of panels 1 through 5 and 6 and 7, or of panels 12 through 15, or of panels 8 through 11, then the view of control panels 16 and 17 could be obscured for that operator (as alleged in the contention). Id. Panel 16 very seldom requires operation by a control room operator. Id. Panel 17 requires very infrequent access also and there are duplicate readouts of the panel on Main Control Board section 1C. Id. These postulated operator positions are not ones where any of the operators would remain. Id. If an operator were in such a position, the other operator(s) would have a clear view of panels 16 and 17 if needed. Id.

13. The SHNPP control room has been laid out such that immediate actions and indication monitoring for design basis accidents will be accomplished from the Main Control Board, so that Applicants are unaware of any Emergency Operating Procedure which could be impeded by an obstructed view of the panels which are the subject of Contention 132C(II).

14. Therefore, the SHNPP control room is a well-designed human engineered control room with no impediments to operator abilities to read and integrate control panel information during accidents, and the layout is designed in accordance with all NRC guidance and regulations to ensure the public safety. Id.

This the 9<sup>th</sup> day of May, 1984.

  
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