

October 10, 1984
USNRC

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
CAROLINA POWER & LIGHT COMPANY)
and NORTH CAROLINA EASTERN) Docket No. 50-400 OL
MUNICIPAL POWER AGENCY)
)
(Shearon Harris Nuclear Power)
Plant))

APPLICANTS' MOTION FOR SUMMARY
DISPOSITION OF EDDLEMAN-154

Carolina Power & Light Company and North Carolina Eastern Municipal Power Agency ("Applicants") hereby move the Atomic Safety and Licensing Board ("Board"), pursuant to 10 C.F.R. § 2.749, for summary disposition in Applicants' favor of Eddleman Contention 154. As discussed herein, there is no genuine issue as to any fact material to Eddleman Contention 154, and Applicants are entitled to a decision in their favor on Eddleman-154 as a matter of law.

This motion is supported by:

1. "Applicants' Statement of Material Facts As To Which There Is No Genuine Issue To Be Heard on Eddleman-154";
2. "Affidavit of Robert G. Black, Jr. on Eddleman-154" ("Black Affidavit"); and
3. "Applicants' Memorandum of Law In Support of Motions For Summary Disposition of Emergency Planning Contentions."

I. PROCEDURAL BACKGROUND

As admitted by the Board in its "Memorandum and Order (Ruling on Wells Eddleman's Proposed On-Site Emergency Planning Contentions)" (November 1, 1983), at 5, Eddleman-154 contends:

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

As a basis for his contention, Mr. Eddleman asserted:

Annex B says the health physics staff should do the job. But they are not designated to do it initially. The complexity of judgment required in Annex B speaks for itself -- it is beyond the training, as far as the SEP establishes, of ordinary reactor operators. Moreover, there are no educational or other requirements for operators that assure they will exercise good judgment in dealing with this complex task under the pressure of accident conditions, especially in accidents that proceed rapidly to general emergency status.

"Wells Eddleman's Contentions re CP&L Site Emergency Plan" (May 2, 1983).

Applicants served one set of interrogatories and request for production of documents on Mr. Eddleman on the subject of Eddleman-154. See "Applicants' Emergency Planning

Interrogatories and Request For Production of Documents To Intervenor Wells Eddleman (First Set)" (August 9, 1984), at 16-19. "Wells Eddleman's Response to Applicants' 8-09-84 Emergency Planning Interrogatories" was filed September 7, 1984. Neither Mr. Eddleman nor the NRC Staff filed any discovery requests on Eddleman-154. The last date for filing discovery on the contention was August 9, 1984. Discovery on this contention is, therefore, complete.

Eddleman Contention 154 is classified as an emergency planning contention to be addressed in the hearings scheduled to commence in early February, 1985. Written direct testimony on the contention is scheduled to be filed January 21, 1985. Further, the Board has established November 1, 1984 as the last day for filing summary disposition motions on this contention. Thus, the instant motion is timely, and Eddleman Contention 154 is ripe for summary disposition.

II. GOVERNING LEGAL STANDARDS

A. Summary Disposition

"Applicants' Memorandum of Law In Support of Motions For Summary Disposition of Emergency Planning Contentions," filed contemporaneously with this Motion, is fully applicable to this Motion and is incorporated by reference herein.

B. Substantive Law

The Commission's regulations, at 10 C.F.R. §§ 55.21 and 55.22, define the required content of operator and senior operator written examinations to include questions on, inter alia:

Standard and emergency
operating procedures for the
facility and plant.

See 10 C.F.R. § 55.21(j) (emphasis supplied). In addition, the operating ("hands-on") test administered to operator and senior operator candidates, pursuant to 10 C.F.R. § 55.23, requires them to demonstrate, inter alia, an understanding of:

The emergency plan for the
facility, including the op-
erator's or senior opera-
tor's responsibility to de-
cide whether the plan should
be executed and the duties
assigned under the plan.

See 10 C.F.R. § 55.23(k) (emphasis supplied).

In addition, the Commission's emergency planning regulations, at 10 C.F.R. § 50.47(b)(15), require that:

Radiological emergency re-
sponse training is provided
to those who may be called
on to assist in an emergen-
cy.

In particular, the emergency planning regulations expressly require provision for both specialized initial training and periodic retraining of numerous categories of emergency personnel, including:

Personnel responsible for
accident assessment,
including control room shift
personnel.

10 C.F.R. Part 50, App. E, § IV.F.

As noted in footnote 1 to 10 C.F.R. § 50.47, the standards embodied in the Commission's emergency planning regulations are further addressed by NUREG-0654/FEMA-REP-1, "Criteria For

Preparation and Evaluation of Radiological Emergency Response
Plans and Preparedness In Support of Nuclear Power Plants"

(Rev. 1, November 1980). NUREG-0654 Criterion 0.2 provides, in relevant part:

The training program for members of the onsite emergency organization shall, besides classroom training, include practical drills in which each individual demonstrates ability to perform his assigned emergency function.

NUREG-0654 Criterion 0.4 further provides:

Each organization shall establish a training program for instructing and qualifying personnel who will implement radiological emergency response plans. The specialized initial training and periodic retraining programs * * * shall be provided [for] * * *:

b. Personnel responsible for accident assessment.

Finally, NUREG-0654 Criterion 0.5 provides that:

Each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities.

The Commission's emergency planning regulations further mandate that:

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and

deficiencies identified as a result of exercises or drills are (will be) corrected.

See 10 C.F.R. § 50.47(b)(14). Similarly, 10 C.F.R. Part 50, Appendix E, § IV.F requires, in relevant part, that:

The plan shall describe provisions for the conduct of emergency preparedness exercises. Exercises shall test the adequacy of timing and content of implementing procedures and methods, * * * and ensure that emergency organization personnel are familiar with their duties.

(Emphasis supplied). These planning standards are implemented through NUREG-0654 Evaluation Criteria N.1 through N.5, which detail the necessary provisions for emergency preparedness exercises and drills.

III. ARGUMENT

Applying the Commission's summary disposition standards to the facts of this case, it is clear that the instant motion for summary disposition of Eddleman Contention 154 should be granted. As discussed in Section I above, Mr. Eddleman's contention was admitted solely on the basis of his concern that reactor operators would be unable to "make the detailed judgments that may be required by the procedures for dose estimating, given in Annex B of the SEP" (emphasis supplied). In the basis for his contention, Mr. Eddleman emphasized the "complexity of judgment required in Annex B." Mr. Eddleman's concern is thus premised on the faulty assumption that Annex B

of the onsite emergency plan constitutes the "procedures" for dose projection for use by operators in an emergency.

Contrary to Mr. Eddleman's assertions, Annex B merely provides the technical basis for dose projection, and is not a procedure. Annex B describes the theory behind the algorithm which provides the basis for the dose projection procedures which are used by operators assigned to perform dose projections. Black Affidavit, ¶ 3. The actual dose projection procedures themselves are included in "Plant Emergency Procedures ["PEP"] For SHNPP" (Plant Operating Manual, Volume 2, Book 5), provided to the parties under cover letter to the NRC dated September 12, 1984. Black Affidavit, ¶ 10. Mr. Eddleman's concern about an operator's ability to use Annex B as a procedure to perform dose projection calculations is thus baseless. Accordingly, the Board should summarily dismiss Eddleman-154 on that ground alone.

Moreover, the dose projection procedures which are used by the operators do not involve the "complexity of judgment" with which Mr. Eddleman is concerned. Black Affidavit, ¶¶ 2, 4. Indeed, no dose projection calculations at all are necessary to make initial protective action recommendations to offsite authorities. Instead, a flow chart (Figure 4.5-1 of the onsite plan) is used to make recommendations based upon plant conditions as determined by Emergency Action Levels ("EALs"). Black Affidavit, ¶¶ 5-7.

After this initial recommendation is made, it is confirmed through dose projection calculations. Black Affidavit, ¶ 8. These calculations may be performed either by using the ERFIS computer (Black Affidavit, ¶ 9) or by using a pocket calculator (Black Affidavit, ¶ 10). A step-by-step "cookbook"-type procedure has been developed for the manual method of performing dose projection calculations. Black Affidavit, ¶ 10. The dose projection procedures for use by the Harris operators -- like those in use at other operating nuclear plants across the nation -- are written to require no detailed operator judgment. Black Affidavit, ¶ 4. Thus, regardless of whether the dose projection calculations are performed using a computer or a pocket calculator, the procedures involve no detailed operator judgment. Black Affidavit, ¶¶ 2, 4, 9, 11, 18.

The Reactor Operator ("RO") and Senior Reactor Operator ("SRO") written examinations administered to all license candidates are required to include questions on plant emergency operating procedures, including the PEPs. See 10 C.F.R. §§ 55.21, 55.22. In addition, the operating ("hands-on") test administered to RO and SRO license candidates requires them to demonstrate, inter alia, an understanding of "[t]he emergency plan for the facility, including * * * the duties assigned under the plan." See 10 C.F.R. § 55.23(k).

The Commission's regulations and emergency planning guidance further require the provision of radiological emergency response training for the onsite emergency organization. See

10 C.F.R. § 50.47(b)(15); NUREG-0654, Criterion 0.5. The regulations specifically require both specialized initial training and periodic retraining of "[p]ersonnel responsible for accident assessment, including control room shift personnel." See 10 C.F.R. Part 50, App. E, § IV.F. This includes dose projection personnel. See also NUREG-0654, Criterion 0.4.

In compliance with these standards, all personnel who may be assigned to perform dose projections receive training in the methods used to perform those projections. This training includes working sample problems. The operators must demonstrate a satisfactory understanding of the steps of the dose projection procedures, and must provide correct answers to the problems using the procedures. Black Affidavit, ¶ 12. The NRC Staff has approved the description of Applicants' training program, as contained in the onsite plan. Black Affidavit, ¶ 17.

In addition to classroom training, NUREG-0654 Criterion 0.2 also provides for "practical drills in which each individual demonstrates ability to perform his assigned emergency function." See also 10 C.F.R. § 50.47(b)(14) (requiring conduct of periodic drills "to develop and maintain key skills"). In compliance with these standards, a number of practice drills will be conducted. Performance of dose projection calculations using the procedures will be critiqued by controller/evaluators knowledgeable in the subject. Black Affidavit, ¶ 13. One practice drill for the pre-licensing exercise will be a rehearsal drill using a complete scenario (including release

data, dose projection data, and complete message sheets). This drill will be conducted like the full-scale exercise, using controller/evaluators. Dose projection calculations performed by the operators will be compared against the correct answers included in the drill scenario. Black Affidavit, ¶ 14.

Finally, the Commission's regulations and regulatory guidance mandate the conduct of periodic exercises to "ensure that emergency organization personnel are familiar with their duties." 10 C.F.R. Part 50, Appendix E, § IV.F. See also 10 C.F.R. § 50.47(b)(14); NUREG-0654 Criteria N.1-N.5. In accordance with these standards, a full-scale exercise will be conducted prior to operation of the Harris plant above 5% power. This exercise will once again test the shift operators' dose projection capabilities. The full-scale exercise will be observed and scored by federal evaluators. Black Affidavit, ¶¶ 15-16. The NRC Staff has approved the description of Applicants' program of drills and exercises, as contained in the onsite plan. Black Affidavit, ¶ 17.

In summary, the basis for Eddleman-154 -- Mr. Eddleman's concern that Annex B of the onsite plan is too complex for use by operators in projecting doses -- lacks merit, because Annex B is not a dose projection procedure. Eddleman-154 should be dismissed for that reason alone. In any event, initial protective action recommendations are based on plant conditions; dose calculations are not required. After the initial recommendation is made, operators project doses using step-by-step procedures

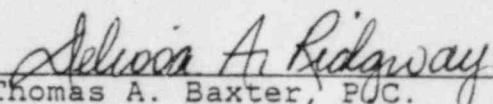
(like those in use at other plants across the nation), which are written to require no detailed operator judgment. All personnel who may be assigned to perform dose projection calculations receive training in the dose projection procedures, and have their knowledge tested through practice problems, drills, and exercises.

There is no evidence whatsoever to suggest that the Harris operators will be unable to perform dose projection calculations using the applicable procedures. Mr. Eddleman's personal skepticism about the abilities of operators to be trained to perform the calculations is simply insufficient to trigger an evidentiary hearing. He cannot avoid summary disposition on the basis of guesses or suspicions, or on the hope that at the hearing Applicants' evidence may be discredited or that "something may turn up." See Gulf States Utilities Company (River Bend Station, Units 1 and 2), LBP-75-10, 1 N.R.C. 246, 248 (1975). Thus, even as to the ability of the operators to perform dose projection calculations using the applicable procedures (rather than Annex B) -- which is not the thrust of the contention as admitted -- there is no genuine issue as to any material fact.

IV. CONCLUSION

Because there is no genuine issue of material fact to be heard on the issue of the abilities of the Harris operators to perform dose projections, Applicants' Motion For Summary Disposition of Eddleman-154 should be granted.

Respectfully submitted,


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