

DOCKETED  
USNRC

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

'83 SEP 29 PM 2:23

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

In the Matter of )  
 )  
CAROLINA POWER & LIGHT COMPANY )  
AND NORTH CAROLINA EASTERN ) Docket Nos. 50-400-OL  
MUNICIPAL POWER AGENCY ) 50-401-OL  
 )  
(Shearon Harris Nuclear Power )  
Plant, Units 1 and 2) )

STATEMENT OF APPLICANTS' POSITION ON  
WELLS EDDLEMAN'S MATERIAL FACTS AS TO  
WHICH THERE IS NO GENUINE ISSUE TO BE HEARD

Applicants' position with respect to each fact specified by  
Mr. Eddleman in his Motion for Partial Summary Disposition on  
Eddleman Contention 80 is set forth below.

EDDLEMAN FACT NO. 1:

Applicants' (NRC) models of radionuclide mixing and disper-  
sion (XOQDOQ and RG 1.145) cannot account for rainout.

APPLICANTS' POSITION:

Applicants' models are capable of modeling "rainout." The  
models do not account for rainout because it is inappropriate to  
consider the effects of wet deposition at a site where there is  
not a distinct rainy season that corresponds to the grazing season.  
Regulatory Guide 1.111.

EDDLEMAN FACT NO. 2:

Rainout significantly increases deposition of radionuclides,  
up to several orders of magnitude.

APPLICANTS' POSITION:

As demonstrated in the McFeaters Affidavit and Smith Affidavit attached to "Applicants' Reply to Wells Eddleman's Motion for Partial Summary Disposition on Eddleman Contention 80" (hereinafter "Applicants' Reply"), the annual effects from rainout will not increase radionuclide deposition by a significant amount. The Smith Affidavit shows that Mr. Eddleman's reliance on a 1957 article by Smith and Singer (BNL 3391) simply is misplaced. Thus, there is no material issue because it is an uncontroverted fact that rainout is not significant in calculating annual radionuclide deposition.

EDDLEMAN FACT NO. 3:

"Several orders of magnitude" means at least 100 times.

APPLICANTS' POSITION:

Applicants have no opinion on the truth of this fact, but disagree that it is a material fact or relevant in any way to Contention 80.

EDDLEMAN FACT NO. 4:

Applicants' dose estimates, corrected for rainout per the summary of BNL 3391 (p. 16) (see fig. 12 thereof, and figs 10, 11 & 13) exceed applicable NRC limits, including Appendix I and the limits cited for normal operation in Eddleman 80.

APPLICANTS' POSITION:

As the McFeaters and Smith Affidavits attached to Applicants' Reply demonstrate, the rainout effect on radionuclide deposition

and, thus, on dose calculations for annual routine releases of radionuclides is insignificant. For an accidental release or one-time exposure to routine releases, Applicants' failure to account for rainout actually contributes to the conservatism of the models. See "Applicants' Motion for Summary Disposition of Intervenor Wells Eddleman's Contention 80 (Atmospheric Dispersion Model)." Therefore, it is Applicants' position that there is no material issue with regard to Eddleman Fact No. 4 because Mr. Eddleman has offered no scientific support for his assertion that Applicants' dose estimates exceed the limits for routine or accidental releases.

EDDLEMAN FACT NO. 5:

Applicants' models for radionuclide airborne dispersion are NRC's XOQDOQ and RG 1.145.

APPLICANTS' POSITION:

Applicants agree that they use models identical in all significant respects to NRC XOQDOQ and Reg. Guide 1.145.

EDDLEMAN FACT NO. 6:

Population radiation doses in excess of NRC rules should certainly not be allowed.

APPLICANTS' POSITION:

Applicants do not understand the relevance of Eddleman Fact No. 6, in light of the fact that Applicants have shown conclusively that their estimates of dose do not exceed NRC rules whether or not rainout is considered.

EDDLEMAN FACT NO. 7:

Figures 10, 11, 12 and 13 of BNL 3391 showing deposition of nuclides with rainout, are generally 1000 times higher in deposition shown, then the deposition without rainout shown in Figs 2, 3, 7 and 8 thereof.

APPLICANTS' POSITION:

Eddleman Fact No. 7 is not relevant to Contention 80. The Smith Affidavit shows that the article cited by Mr. Eddleman has no relevance to calculating radionuclide deposition for normal routine operations emissions during the course of a year at a modern nuclear power plant.

EDDLEMAN FACT NO. 8:

1000 is more than 100.

APPLICANTS' POSITION:

Applicants question the materiality of this fact, but agree that there is no genuine issue as to its veracity.

Dated: September 27, 1983

Respectfully submitted,

*Pamela H. Anderson*

---

Thomas A. Baxter, P.C.  
John H. O'Neill, Jr.  
Pamela H. Anderson  
SHAW, PITTMAN, POTTS & TROWBRIDGE  
1800 M Street, N.W.  
Washington, D.C. 20036  
(202) 822-1000

Richard E. Jones  
Samantha Francis Flynn  
CAROLINA POWER & LIGHT COMPANY  
P.O. Box 1551  
Raleigh, North Carolina 27602  
(919) 836-6517

Counsel for Applicants