

August 1, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of
DUKE POWER COMPANY, ET AL.
(Catawba Nuclear Station,
Units 1 and 2)

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Docket Nos. 50-413
50-414

NRC STAFF MOTION FOR SUMMARY
DISPOSITION OF DES CONTENTION 11

I. INTRODUCTION

The NRC Staff moves the Licensing Board, pursuant to 10 CFR Section 2.749 of the Commission's Rules of Practice, for summary disposition in its favor of DES Contention 11. This contention states that:

A substantial part of the population placed at risk by nuclear operations at and relating to Catawba are also placed at risk by similar operations at McGuire. A realistic assessment of Catawba will take into consideration McGuire risks.

As grounds for its motion, the Staff asserts that the attached affidavit of Jocelyn A. Mitchell and L. G. Hulman, together with other papers filed in this proceeding, demonstrate that there is no genuine issue of material fact to be heard with respect to DES Contention 11 and that the Staff is entitled to a decision in its favor as a matter of law.

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II. DISCUSSION

A. Commission Standards for Summary Disposition

The Commission's Rules of Practice provide that summary disposition of any matter involved in an operating license proceeding shall be granted if the moving papers, together with the other papers filed in the proceeding, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law. 10 CFR 2.749(d). The use of summary disposition has been encouraged by the Commission and the Appeal Board to avoid unnecessary hearings on contentions for which an intervenor has failed to establish the existence of a genuine issue of material fact. E.g., Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 457 (1981); Houston Lighting and Power Company (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 550-551 (1980); and Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-107, 6 AEC 188, 194 (1973); aff'd, CLI-73-12, 6 AEC 241, 242 (1973); aff'd sub nom, BPI v. AEC, 502 F.2d 424 (D.C. Cir. 1974). A material fact is one that may affect the outcome of the litigation. Mutual Fund Investors Inc. v. Putnam Management Co., 553 F.2d 620, 624 (9th Cir. 1977).

When a motion for summary disposition is made and supported by affidavit, a party opposing the motion may not rest upon the mere allegations or denials of his answer but must set forth specific facts such as would be admissible in evidence that show the existence of a genuine issue of material fact. 10 CFR 2.749(b). All material facts

set forth in the statement of material facts required to be served by the moving party will be deemed to be admitted unless controverted by the statement of material facts required to be served by the opposing party. 10 CFR 2.749(a). Any answers supporting or opposing a motion for summary disposition must be served within twenty (20) days after service of the motion. Id. If no answer properly showing the existence of a genuine issue of material fact is filed, the decision sought by the moving party, if properly supported, shall be rendered. 10 CFR 2.749(b).

B. The Staff's Affidavit and Statement of Material Facts Fully Support Summary Disposition of DES Contention 11

The accompanying Staff affidavit and statement of material facts demonstrate that there are no genuine factual issues to be litigated as to any fact material to the legal question as to whether the Staff has satisfied its obligations under the National Environmental Policy Act (NEPA), regulations implementing the requirements of that Act, and Commission requirements with respect to Staff evaluation of environmental impacts of severe accidents. As a result, the Staff is entitled to a decision as a matter of law and DES Contention 11 should be dismissed.

Section 102(2)(C)(i) of NEPA provides that, "to the fullest extent possible," Federal agencies shall include, with respect to proposed major actions significantly affecting the quality of the environment, a detailed statement of the environmental impact. This NEPA requirement, however, has been interpreted in NRC decisions to be subject to a "rule of reason." Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 779 (1979), relying on NRDC v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972). Thus, "an EIS need not discuss remote

and highly speculative consequences A reasonably thorough discussion of the significant aspects of the probable environmental consequences is all that is required by an EIS.'" Public Service Electric and Gas Co. (Hope Creek Generating Station, Units 1 and 2), ALAB-518, 9 NRC 14, 38-39 (1979) (quoting from Trout Unlimited v. Morton, 509 F.2d 1276, 1283 (9th Cir. 1974)).

Commission regulations require the preparation of an environmental impact statement (EIS) for issuance of an operating license. 10 CFR Section 51.5(a)(2). An EIS prepared in connection with the issuance of an operating license must address "matters which differ from, or which reflect new information in addition to, those matters discussed" in the Final Environmental Statement prepared in connection with the issuance of the construction permit. 10 CFR Section 51.23(e). Further, with respect to evaluation of the risks of severe accidents, the Commission has required the Staff's environmental impact statements to "include a reasoned consideration of the environmental risks (impacts) attributable to accidents at the particular facility or facilities within the scope of each such statement." 45 Fed. Reg. 40101, June 13, 1980.

In its initial review of DES Contention 11, the Licensing Board stated that:

the FES should, at a minimum, contain some recognition of aggregate risks to the people who live between these two nuclear sites. Properly done, such an evaluation would portray the chances over time^{3/} that "worst case" people who live between the two plants would suffer some health consequence as a result of a serious accident at either of the sites, taking into account the distances of people from each of the sites and other relevant factors.

^{3/} The Staff need not consider simultaneous accident scenarios at both facilities, which the Board does not consider credible.

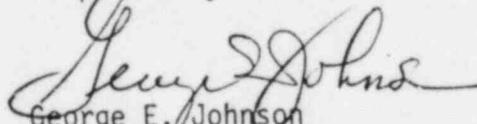
Memorandum and Order, December 1, 1982 at 18. The Staff provided its response to the Board's concern in the Staff's response to Comment 11, in the Catawba FES, at page 9-9. The Board, however, admitted DES Contention 11 for the purpose of clarifying the technical support for the Staff's conclusion "on the combined risks represented by McGuire and Catawba." Memorandum and Order, March 24, 1983.

The attached Affidavit and Statement of Material Facts discusses in detail the method of analysis used by the Staff to arrive at its conclusion in the FES, at page 9-9, with respect to consideration of McGuire risks in addition to the risks of Catawba and the basis for concluding that the presentation of accident risks in the FES is a reasonable one. Thus, contrary to DES Contention 11, the Staff has considered McGuire risks in evaluating the environmental impacts of the operation of Catawba, and its evaluation is both "reasonably thorough" and provides the "reasoned consideration" of risks required by the NEPA mandate as interpreted by Commission case law and policy statements.

III. CONCLUSION

There being no genuine issue as to any material fact, and inasmuch as a decision in favor of the Staff is required as a matter of law, the Staff requests that DES Contention 11 be dismissed.

Respectfully submitted,


George E. Johnson
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 1st day of August, 1983

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STATEMENT OF MATERIAL FACTS AS TO
WHICH THERE IS NO GENUINE ISSUE TO BE HEARD

1. In answer to Comment #11 to the DES, the Staff discussed a method for calculating risk to an individual at a location, "Charlotte," from operation of the Catawba and McGuire plants. Affidavit, ¶ 4, 5.

2. Based on differences in distance and the probability of wind blowing to Charlotte, the risk to an individual at Charlotte of early fatality and of latent cancer fatality from operation of both plants was only slightly greater than from Catawba alone. The increase noted, however, was well within the uncertainty in the calculation of risks from Catawba alone. Affidavit, ¶ 5.

3. While the Staff did not perform a detailed risk calculation for McGuire of the kind made for Catawba, the assumption that the risks were comparable to those of Catawba at comparable distances was justified by similarities between the two plants. Affidavit, ¶ 6.

4. The similarities include power levels, reactor design, climatic region, and emergency protective actions, which were adequately considered in the FES. Affidavit, ¶ 7, 8.

5. Differences in distance and wind direction were accounted for explicitly in the example provided in the FES. Affidavit, ¶ 8.

6. The appearance of a discrepancy between estimates of latent cancer fatality risk in Figure 5.9 of the FES and in the "Charlotte" example was, in fact, an accurate reflection of differences in emergency response assumptions for the population within the 10-mile EPZ and the population outside the 10-mile EPZ, which resulted in a higher predicted dose, and hence a higher risk of latent cancer fatality, to those outside the 10-mile EPZ than to those inside that zone. Affidavit, ¶ 9.

7. The same discontinuity, that is, higher risk to the population outside the 10-mile EPZ than to the population within it, can be expected with respect to early fatality calculations, for the same reason. Affidavit, ¶ 10.

8. The Staff's answer to the comment on the DES made no judgment as to the significance of either Catawba or McGuire risks, but only assessed the individual risks relative to each other and in comparison with the uncertainties in the calculations. There was, therefore, no inconsistency between the answer given and the portion of the Commission policy statement quoted by the Licensing Board. Affidavit, ¶ 11.

9. The two risks of primary concern to the health of the public from accidents at nuclear power plants are early fatality and latent cancer fatality risks. Affidavit, ¶ 12.

10. Early fatality risk is an accident phenomenon of very close-in distances. Affidavit, ¶ 13.

11. The FES stated that for Catawba all the early fatalities were predicted to be within 20 miles of the plant. Affidavit, ¶ 13.

12. As a result of the effects of radioactive decay, plume spread, ground shine, and deposition of material, average predicted early fatalities drop rapidly with distance. Affidavit, ¶ 13, 14.

13. Because of the similarities in power levels, reactor design, climatic region, and emergency protective actions, discussed in paragraphs 7 and 8 of the Affidavit, the risks for Catawba can be used to approximate the risks for McGuire by considering specifically distances and wind roses. As a result, the Staff was able to conclude that the early fatality risks from McGuire were confined to the area outside the EPZ, but within 20 miles from the site. Affidavit, ¶ 15.

14. Because the distance between McGuire and Catawba is almost 30 miles, and considering all the factors previously discussed, the Staff concluded that the population at risk of early fatality from operation of Catawba is not the same as the population at risk of early fatality from operation of McGuire. Affidavit, ¶ 16.

15. In considering the total societal latent cancer fatality risk from accidents, the Staff in the FES considered populations out to 2000 miles. Because the distances considered are so large, the populations at risk from operation of McGuire and of Catawba are much the same. Affidavit, ¶ 17.

16. In the FES, the Staff calculated the total cancer fatality risk from accidents to be 0.012 per reactor year; thus, considering four reactors the total societal accident risk is 0.05 per year. Affidavit, ¶ 17.

17. The total societal cancer fatality risk from accidents attributable to the Catawba and McGuire plants is extremely small compared to the cancer

fatality risk already experienced by the population within 2000 miles of both sites from other causes. Affidavit, ¶ 17.

18. For purposes of calculating total latent cancer fatality risk for the population 50 miles from each plant, while the populations do not entirely overlap, the Staff assumed, for its calculations that they are identical, since the majority of the population within 50 miles of each plant is probably concentrated in Charlotte and its environs. Affidavit, ¶ 18.

19. The total latent cancer fatality risk for the population within 50 miles from Catawba and McGuire from operations at both facilities is 2×10^{-2} per year, an extremely small fraction of the background societal risk of latent cancer fatalities to the same population from all causes (3×10^3 per year). Affidavit, ¶ 18.

20. Based on the analysis presented in the affidavit, the Staff concludes that none of the conclusions in the FES (that the environmental cost of accidents is "small", that there are no special or unique circumstances about the Catawba site or environs that would warrant special mitigation features; that risks of early fatality are small compared with risks of early fatality from other human activities; and that population exposures and latent cancer fatality risks are comparable to those from normal operation) would be changed by considering McGuire risks in addition to the risks of Catawba. Therefore, the presentation of accident risks in the FES is a reasonable one, and the cost-benefit considerations remain the same. Affidavit, ¶ 19.