



July 8, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

APPLICANTS' MOTION FOR RECONSIDERATION OF CCNC
CONTENTION 4 AND CHANGE CONTENTION 9 AND APPLICANTS'
RESPONSE TO INTERVENOR WELLS EDDLEMAN'S CONTENTIONS
REGARDING SPENT FUEL TRANSPORTATION

Applicants Carolina Power & Light Company ("CP&L") and North Carolina Eastern Municipal Power Agency hereby move the Board to dismiss CCNC Contention 4 and CHANGE Contention 9, which were previously admitted by the Board in its "Memorandum and Order (Reflecting Decisions Made Following Prehearing Conference)" of September 22, 1982 ("September 22 Order"). Both contentions assert that the impact of transportation of spent fuel from CP&L's Robinson Unit 2 and Brunswick Units 1 and 2 to the Harris Plant for interim storage should be factored into

the environmental analysis relating to the operation of the Harris Plant.^{1/}

By a pleading entitled "Wells Eddleman's Response to Staff DEIS" dated June 20, 1983 ("June 20 Pleading"), Intervenor Wells Eddleman has proposed a new contention (Eddleman 25B) regarding alternatives to the transshipment of spent fuel to the Harris Plant, and has reaffirmed his desire to litigate a number of contentions regarding spent fuel transshipments that were previously deferred by the Board (Eddleman 25, 64D, 64E, and 126X). For the reasons set forth in detail below, each of Mr. Eddleman's proposed contentions regarding spent fuel transshipments must be rejected.

I. BACKGROUND

Applicants, as part of their application for an operating license, seek authority to receive and store at the Harris Plant spent fuel from CP&L's Robinson Unit 2 and Brunswick Units 1 and 2. Applicants are not requesting authority to transship spent fuel from Robinson and Brunswick to the Harris Plant. CP&L already has authority, by virtue of its licenses to operate the Robinson and Brunswick Plants, and by virtue of the general license conferred on it by 10 C.F.R. § 70.42(b)(5), to transfer the spent fuel "to any person authorized to receive

^{1/} For the convenience of the Board CCNC 4, CHANGE 9, and Eddleman 25, 25B, 64D, 64E and 126X are reprinted in Appendix A attached hereto.

such special nuclear material under terms of a specific license or a general license or their equivalents"

At the present time, CP&L has no firm plans to ship spent fuel from its Robinson and/or Brunswick Plant to the Harris Plant. Thus, CP&L has not defined schedules or the modes (i.e., truck or rail) of transportation of spent fuel to the Harris Plant, has not selected routes, and has not requested NRC approval of any routes for such shipment. The shipment of spent fuel from CP&L's Robinson and/or Brunswick Plant to the Harris Plant in the future is, however, a possibility. It is Applicants' intention that any shipments will be made such that their environmental impacts will be encompassed within the values contained in Table S-4 to 10 C.F.R. § 51.20. As such, the number of shipments of spent fuel from Robinson and/or Brunswick to the Harris Plant, either by rail or by truck, would be within the parameters underlying the assumptions to Table S-4. See Affidavit of L. H. Martin dated July 6, 1983 (attached hereto as Appendix B).

The Commission has already considered the environmental impacts of the transportation of spent fuel from Robinson and Brunswick to any facility authorized to receive it in the context of the licensing proceeding for those two facilities. See U.S. Nuclear Regulatory Commission, Final Environmental Statement Related to the Operation of H.B. Robinson Nuclear Steam-Electric Plant Unit 2 (NUREG-75/024), at § 5.4.4.2 (April, 1975); U.S. Atomic Energy Commission, Final

Environmental Statement Related to the Continued Construction and Proposed Issuance of an Operating License for the Brunswick Steam Electric Plant, Units 1 and 2, at V-45 to V-55 (January, 1974). Absent unanalyzed, significant impacts, this issue need not be revisited in the instant proceeding.

The issue presented to this Board regarding the transshipment of spent fuel between licensed nuclear plants and a plant subject to an operating licensing proceeding is not a novel one. In the operating license proceeding for Duke Power Company's Catawba Nuclear Station, Units 1 and 2, the applicant sought to receive and store spent fuel from its Oconee and McGuire Plants at Catawba. There the NRC Staff articulated the position that was subsequently adopted by the Staff in the instant proceeding: "The Licensing Board should not in this proceeding reexamine the environmental impact of Oconee and McGuire spent fuel transportation absent a showing of changed circumstances arising out of the Catawba Application which demonstrates that reconsideration of environmental impacts of transshipment of Oconee and McGuire fuel is warranted in this proceeding." See Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), "NRC Staff Position on Applicability of Table S-4 to Transshipment of Spent Fuel from Oconee and McGuire to Catawba," at 16 (December 13, 1980); Tr. 540 (Prehearing Conference, February 24, 1983, statement of Charles Barth, NRC Staff). The Licensing Board in Catawba agreed with the Staff's position and rejected contentions proposed by intervenors there

regarding the environmental impacts of shipping spent fuel from Oconee and McGuire to Catawba. See Duke Power Co. (Catawba Nuclear Station Units, 1 and 2), Memorandum and Order (Ruling on Spent Fuel Contentions), slip opinion at 6-7 (February 25, 1983).

The Licensing Board here, in admitting CCNC 4 and CHANGE 9, presumed that the Staff would include in the draft environmental statement ("DES") for Harris an analysis of any "previously unanalyzed impacts" of transshipment of spent fuel from Robinson and Brunswick. September 22 Order at 20. The Board further stated its "tentative view" that Table S-4, or some multiple thereof, might be applied to the situation presented by transshipment of spent fuel from CP&L's existing plants to the Harris Plant. The Board stated that it would reconsider this question in light of the NRC Staff's analysis in the DES. Subsequently, the Staff has determined that the environmental effects of the the transshipment of the spent fuel from Robinson and Brunswick to the Harris Plant need not be analyzed in the DES. Reconsideration of these two contentions is now appropriate.

II. ARGUMENT

- A. THE FINAL ENVIRONMENTAL STATEMENTS FOR ROBINSON UNIT 2 AND BRUNSWICK UNITS 1 AND 2 ADEQUATELY ACCOUNT FOR THE ENVIRONMENTAL IMPACTS OF SHIPPING SPENT FUEL FROM ROBINSON AND BRUNSWICK TO EITHER A FUEL REPROCESSING PLANT OR SOME OTHER FORM OF AUTHORIZED DISPOSAL INCLUDING INTERMEDIATE SHIPMENT TO AND STORAGE AT THE HARRIS PLANT.
-

While it is certainly true that transshipment from Robinson and Brunswick to the Harris Plant is a reasonably foreseeable possible outcome of authorization to store spent fuel from those plants at the Harris facility, it does not follow that environmental impacts from such transshipment must be considered in the context of the authorization for the Harris Plant to receive and store the Robinson and Brunswick spent fuel. NEPA does not require preparation of duplicative environmental reviews for every licensed activity. This principle is well established in Appeal Board decisions regarding amendments to operating licenses, especially amendments to permit expansion of spent fuel storage pools. In one such decision the Appeal Board stated plainly:

Nothing in NEPA or in those judicial decisions to which our attention has been directed dictates that the same ground be wholly replowed in connection with a proposed amendment to those 40-year operating licenses. Rather, it seems manifest to us that all that need be undertaken is consideration of whether the amendment itself would bring about significant environmental consequences beyond those previously assessed and, if so, whether those consequences (to the extent unavoidable) would be sufficient on balance to require a denial of the amendment application.

Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2) and Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station) ALAB-455, 7 NRC 41, 46 n.4 (1978), remanded on other grounds sub nom. Minnesota v. Nuclear Regulatory Commission, 602 F.2d 412 (D.C. Circuit 1979); see also Portland General Electric Co. (Trojan Nuclear Power Plant), ALAB-531, 9 N.R.C. 263, 266 n.6 (1979). In Consumers Power Co. (Big Rock Point Nuclear Plant), ALAB-636, 13 N.R.C. 312 (1981), the Appeal Board took this line of reasoning one step further and reversed a licensing board decision which had held that an environmental impact statement ("EIS") was required to consider the environmental impacts of both spent fuel pool expansion and the additional term of operation permitted by such expansion. The Licensing Board had distinguished Prairie Island and Trojan, supra, because the nuclear plant in question had been licensed prior to NEPA and no environmental analysis had previously been prepared on the impacts of plant operation. The Appeal Board held that NEPA "is not an authorization to undo what has already been done," and that to formulate an EIS on continued plant operation -- an activity already licensed by the NRC -- "would trivialize NEPA's EIS requirement." Id. at 328, quoting Jones v. Lynn, 477 F.2d 885, 890 (1st Cir. 1976).^{2/}

^{2/} While these cases have focused on environmental analyses previously performed for the same plant, there is no reason not to apply the principle where environmental impacts that may be associated with one activity have previously been considered in

(Continued Next Page)

In Duke Power Co., supra, the Licensing Board addressed the identical issue presented to this Board. Duke Power Company requested authority to receive and store spent fuel from its Oconee and McGuire plants at the Catawba facility subject to an ongoing licensing proceeding. The applicant declared its intent that the environmental impacts of fuel shipments to Catawba would conform to the values contained in Table S-4. The Licensing Board in Catawba concluded:

In view of applicant's stipulation that the environmental impacts of fuel shipments to Catawba will conform to the values contained in Table S-4 and the Staff's position as stated in new Appendix G to the FES, we believe that Table S-4 and the March 1972 FES for Oconee adequately account for the environmental impacts of shipping spent fuel from Oconee and McGuire to a fuel reprocessing plant (or some other form of authorized disposal), including intermediate shipment to Catawba. Therefore, we reject DES 10 and the transshipment part of DES 19 as impermissible attacks on a Commission rule.

Duke Power Co. (February 25, 1983), supra, slip opinion at 6-7.

Applicants here have similarly expressed their intent that any shipments from CP&L's Robinson and/or Brunswick Plant to the Harris Plant will be made so that their environmental impacts will be encompassed within the values contained within Table S-4. Under the circumstances, the same logic that the

(Continued)

connection with another activity. See e.g., Council on Environmental Quality regulations on "tiering" environmental impact statements at 40 C.F.R. § 1502.20.

licensing board in Catawba applied to Duke Power Company's situation equally applies here. Any further analysis of the environmental impacts of such shipments would be duplicative to the environmental analyses previously provided in the final environmental statements associated with Robinson Unit 2 and with Brunswick Units 1 and 2.

- B. ASSUMING ARGUENDO THAT THERE COULD BE SOME INCREMENTAL, UNANALYZED ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE TRANSSHIPMENT OF SPENT FUEL TO, AND INTERIM STORAGE AT, THE HARRIS PLANT, SUCH INCREMENTAL ENVIRONMENTAL IMPACTS WOULD BE NO MORE THAN A FRACTION OF THE VALUES OF TABLE S-4 AND THUS ARE INSIGNIFICANT.

Both CCNC and CHANGE/ELP have argued that Table S-4 values are inappropriately applied to a transshipment of spent fuel from CP&L's existing plants to the Harris Plant because the assumption underlying Table S-4 involves the transportation of spent fuel from a nuclear plant to a reprocessing plant. This issue was briefed extensively by Applicants and by CCNC and CHANGE/ELP prior to the Board's decisions on CCNC 4 and CHANGE 9. The Board stated its tentative view:

"that the S-4 Table or some multiple thereof can be applied to this situation. For example, it would appear that one might reasonably double certain S-4 values on the theory that the fuel from Robinson and Brunswick is spent fuel in both legs of the trip, not just one. Even under that approach, however, the resulting impacts would be small."

September 22 Order at 20. The Board's "tentative view" is clearly correct. If we were to assume that certain or all of the Table S-4 values should be doubled to take into account

some possible previously unanalyzed environmental impact, the resulting values which reflect the total environmental impacts of all fuel transportation are still de minimis. The Catawba Board analyzed the Table S-4 values, as applied to McGuire spent fuel transportation, that might be impacted by the proposed transshipments to Catawba. The Catawba Board determined that the only area that might be affected is the dose to some individuals living close to the roadways that would carry the truck traffic. The Board noted, however, "even the members of the public who would be most exposed would receive only de minimis doses (e.g., at most a few milirem), doses that could not possibly affect an NEPA cost/benefit analysis." Duke Power Co. (February 25, 1983), supra, slip opinion at 8 n.3.

Here CCNC and CHANGE/ELP have not proffered any information which suggests that there could be any environmental impacts of the transshipment of spent fuel from Robinson and Brunswick to Harris that have not previously been analyzed. The analysis by the Board in Catawba, relying on straightforward logic, suggests that any such unanalyzed incremental impacts would be insignificant in any event.

C. CCNC 4 AND CHANGE 9 SHOULD BE DISMISSED.

The only aspect of CCNC 4 and CHANGE 9 that was accepted by the Board was the contention that "some previously unanalyzed impact" of transshipment might be presented. It is clear from the attached Affidavit of L. H. Martin and from the

Staff's position in the Harris DES that there will be no previously unanalyzed impacts. Even assuming arguendo that the transshipment of spent fuel from CP&L's existing plants to the Harris Plant, with interim storage at the Harris Plant prior to shipment to a repository or reprocessing plant, might involve some incremental, unanalyzed environmental impact, such impacts are without question no more than a fraction of the values set forth in Table S-4. Consequently, such impacts are de minimis and need not be considered in this proceeding. Intervenor CCNC and CHANGE/ELP have not identified with specificity any incremental impacts which they contend would result from the transshipment of spent fuel to the Harris plant. Rather, both CCNC and CHANGE/ELP argue that Table S-4 should not apply in this situation. The presumption underlying the Board's decision to admit CCNC 4 and CHANGE 9 has been removed and thus CCNC 4 and CHANGE 9 must be dismissed.

D. THE CONTENTIONS PROPOSED BY INTERVENOR WELLS EDDLEMAN RELATING TO SPENT FUEL TRANSPORTATION SHOULD BE REJECTED BY THE BOARD.

1. Eddleman 25 and 25B.

Proposed Eddleman 25 references terrorist attacks postulated in proposed Eddleman 24 (deferred) and then argues that various alternatives should be considered under NEPA in the environmental statement, including re-racking and saving all the spent fuel for transportation in a single train when the license expires. The Board previously deferred its ruling on

Eddleman 25, pending further consideration of Eddleman 24. The Board stated that "[i]f Eddleman 24 is ruled out, the premise for [Eddleman 25] may be removed." September 22 Order at 45.

In his June 20 Pleading at 18, Mr. Eddleman discusses Eddleman 25 but does not clearly indicate his intention regarding this deferred contention (i.e., whether he proposes to submit for ruling, withdraw or revise Eddleman 25). Applicants cannot find anything in Mr. Eddleman's discussion to suggest that he is requesting a ruling on Eddleman 25 at this time. Applicants presume that Eddleman 25 will remain deferred pending further consideration of Eddleman 24. Mr. Eddleman then leaps from his discussion of Eddleman 25 to offer a new contention, Eddleman 25B, which is no more than a variation on the theme of Eddleman 25:

The DEIS has improperly failed to consider the radiological impacts and NEPA alternatives to, and cost-benefit of shipping spent fuel to Harris.

There are a number of different responses to proposed Eddleman 25B. As a late-filed contention, allegedly based wholly on information previously unavailable in the DES, Eddleman 25B must be rejected as failing to meet the criteria established by the Appeal Board in Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 N.R.C. ____, (August 19, 1982), aff'd, in part, and vacated, in part, CLI-83-19, 17 N.R.C. ____ (June 30, 1983). The Appeal Board there held that a late-filed contention cannot be rejected as untimely if it:

(1) is wholly dependent upon the content of a particular document; (2) could not therefore be advanced with any degree of specificity (if at all) in advance of the public availability of the document; and (3) is tendered with the requisite degree of promptness once the document comes into existence and is accessible for public examination.

ALAB-687, slip opinion at 16. Eddleman 25B is not "wholly dependent" on the DES. Mr. Eddleman has been on notice for many months that the NRC Staff would not address the transshipment of spent fuel to the Harris Plant in the DES. See Tr. 540. He thus has no reason to be "very surprised." Mr. Eddleman was able to advance a similar contention, albeit based on sabotage (Eddleman 25), regarding the lack of an analysis of alternatives to transshipments of spent fuel and storage at Harris, at the time he filed his original set of contentions. There is nothing new in the DES regarding spent fuel shipments and this contention could clearly have been filed months earlier. Furthermore, Contention 25B is new and Mr. Eddleman must address all five of the factors listed in 10 C.F.R. § 2.714(a)(1).

CLI-83-19, supra, slip. op. at 5. This he has failed to do.^{3/}

Addressing briefly the merits of Eddleman 25B: To the allegation that the DES "failed to consider radiological impacts" of spent fuel shipments from Robinson and Brunswick to Harris, our response is simply that such impacts are not raised by the

^{3/} In Applicants' Response to Contentions of Intervenor Wells Eddleman Relating to the Draft Environmental Statement, filed contemporaneously, we proposed that Mr. Eddleman address the five factors at the July 20, 1983 pre-hearing conference.

application to receive and store such spent fuel in the Harris spent fuel pool. Radiological impacts of spent fuel shipments from Brunswick and Robinson have previously been considered in the licensing proceedings involving those plants. See Section II.A. supra.

Similarly, "NEPA alternatives to, and cost benefit of, shipping spent fuel to Harris" need not be considered because such shipments are not at issue in this proceeding. But even if such shipments were to be considered in the context of the instant licensing proceeding, the alternatives need not be considered under NEPA because the impacts of spent fuel transshipments are clearly insignificant. Even if Mr. Eddleman were correct and "twice the [Table] S-4 values" were used, the resulting impacts are de minimis. As the Appeal Board has stated, in previously finding that an applicant need not consider alternatives to transshipment of spent fuel from one nuclear plant to another, "neither Section 102(2)(C) nor Section 102(2)(E) of NEPA obligates the federal agency 'to search out possible alternatives to a course which itself will not either harm the environment or bring into serious question the manner in which this country's resources are being expanded.'" Duke Power Co. (Amendment to Materials License SNM-1773 -- Transportation of Spent Fuel from Oconee Nuclear Station for Storage at McGuire Nuclear Station) ALAB-651, 14 N.R.C. 307, at 321-322 (1981). See also Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 N.R.C. 263, 266 (1979); Virginia Electric

Power Co. (North Anna Nuclear Power Station, Units 1 and 2), ALAB-584, 11 N.R.C. 451, 457-58 (1980); Public Service Electric and Gas Co. (Salem Nuclear Generating Station, Unit 1), ALAB-650, 14 N.R.C. 43, 65 n.33 (1981). Again, this very issue was raised by intervenors in the Catawba proceeding and was rejected for the reasons discussed above. Duke Power Co. (February 25, 1983), supra, slip opinion at 4 n.1. For all of the foregoing reasons, Eddleman 25B must be rejected.

2. Eddleman 64D and 64E

Eddleman 64D and 64E relate to transport accidents. Eddleman 64D appears to assert that the risk and probability of transport accidents are increased by transshipments to Harris, although the discussion of this contention in Mr. Eddleman's June 20 Pleading at 25 appears to go to shipments of spent fuel from Harris. Eddleman 64E appears to relate principally to the radiological impacts of transport accidents. It is not clear whether Eddleman 64E is meant to apply to transshipments to Harris or shipments of spent fuel from Harris.

Mr. Eddleman faults the Staff for reproducing Table S-4 only once in the DES. He makes the assumption that all of the spent fuel from Robinson and Brunswick will be shipped to Harris and thus suggests that Table S-4 understates the radiological impacts by a factor of five. June 20 Pleading at 25. This suggestion is without merit. Table S-4 clearly represents the radiological impacts of all transportation

related to the operation of one light water reactor. It is obvious that for two units the Table S-4 values should be doubled. If Mr. Eddleman believes there is some ambiguity here, the Staff might treat Mr. Eddleman's remarks as a comment on the DES. Certainly not all of the spent fuel from Robinson and Brunswick will be shipped to Harris. There is insufficient space to store spent fuel from five reactors at Harris. But even if that scenario were to take place the environmental impact represented by multiplying the Table S-4 values by five is still clearly insignificant.

The Commission's rules of practice direct the Staff to include Table S-4 in the DES. 10 C.F.R. § 51.23(a). Table S-4 includes a statement regarding the radiological effects of transport accidents. This statement is supported by the U.S. Atomic Energy Commission's Environmental Survey of Transportation of Radioactive Materials to and from Nuclear Power Plants (WASH-1238) (December 1972). In the Statement of Consideration accompanying the Commission's adoption of § 51.20(g) and Table S-4, the Commission addressed the question of transport accidents in the context of the new rule:

With respect to the effect of accidents on members of the public, the Survey contains an extensive discussion of accident severity categories, together with the accident probabilities for those categories for truck, rail and barge per vehicle mile. Accident consequences for many of the more severe categories of accidents are analyzed, including accidents with probabilities so low as to be considered incredible. Although accidents even more serious than those analyzed in the

Environmental Survey could be postulated, the Survey shows that their probability is even more remote and that, therefore, a detailed analysis of their consequences is unnecessary to describe adequately the risks to the general public. 40 Federal Register 1005, 1006 (January 6, 1975).

Mr. Eddleman may not challenge Table S-4 and seek to litigate the impacts of transport accidents absent a successful petition pursuant to the Commission's rules at 10 C.F.R. § 2.758.

With respect to transportation of spent fuel to the Harris Plant, such shipments are outside the scope of this proceeding. The environmental impacts, including the radiological impacts of transport accidents, have been considered in the context of the licensing proceeding and final environmental statements for Robinson and Brunswick. See Section II.A. supra. With respect to transportation of spent fuel from the Harris Plant, the values in Table S-4 apply. Any shipments of Robinson and Brunswick spent fuel from the Harris Plant after interim storage can be considered analytically as the second leg in the total transportation of spent fuel from Robinson and Brunswick, previously considered in the context of the Robinson and Brunswick final environmental statements. If one were to assume that the previously analyzed environmental impacts of the transportation of Robinson and Brunswick spent fuel ends with receipt and storage at Harris, any shipments of Robinson and Brunswick spent fuel from Harris arguably represent an incremental environmental impact above the Table S-4 values, but certainly represented by some multiple of Table S-4 values.

Since the Table S-4 values are so small, the precise multiple need not be calculated -- the resulting impact will always be very small.

Eddleman 64D and 64E neither raise issues cognizable in this proceeding nor suggest a potentially significant environmental impact. Both contentions should now be rejected.

3. Eddleman 126X

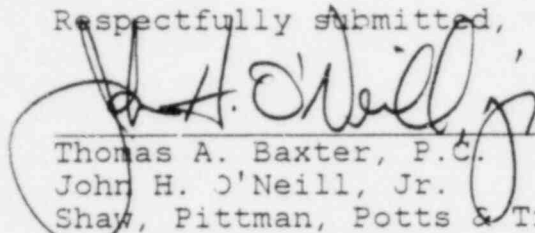
Eddleman 126X, originally borrowed from an intervenor's contention in the Catawba proceeding, should be accorded the same treatment -- rejection -- as its precursor was accorded in Catawba. See Duke Power Co., supra, February 25, 1983 Memorandum and Order. Contention 126X alleges that the Environmental Report should analyze the environmental effects of spent fuel transportation from other CP&L plants to Harris, and factor them into the cost/benefit analysis. Mr. Eddleman suggests that such impacts would be some multiple of Table S-4. June 20 Pleading at 30. This contention is similar to CCNC 4 and CHANGE 9 and should be rejected for the reasons set forth in Section II.C. supra. Mr. Eddleman, in his June 20 Pleading, also raises the issue of accident risks and consequences of transport of spent fuel in discussing Eddleman 126X. This issue was raised previously in Eddleman 64D and 64E and should be rejected for the reasons stated in responding to those contentions above.

III. CONCLUSION

Applicants have stated their intention that any spent fuel shipments from Robinson and/or Brunswick to Harris will be encompassed within the parameters of Table S-4 and thus the radiological impacts will be reflected by the values of Table S-4. No matter how such transshipments of spent fuel are viewed, the Table S-4 values -- established by Commission rule -- cannot be challenged absent a successful petition pursuant to 10 C.F.R. § 2.758. Shipments of spent fuel from Robinson and Brunswick to Harris, with eventual shipments to a reprocessing facility or final repository, can be viewed analytically as two legs of a journey previously analyzed in the context of the Robinson and Brunswick licensing proceedings. As such, any transportation impacts are outside the scope of this proceeding. Even assuming arguendo that there are some incremental, unanalyzed radiological impacts of spent fuel shipments either to or from the Harris Plant, such impacts are encompassed within a multiple of the values of Table S-4 and are clearly insignificant.

CCNC 4 and CHANGE 9 should be dismissed. Eddleman 25B,
64D, 64E and 126X should be rejected. Eddleman 25 should
remain deferred.

Respectfully submitted,



Thomas A. Baxter, P.C.
John H. O'Neill, Jr.
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) 836-7707

Counsel for Applicants

Dated: July 8, 1983

CONTENTIONS ON SPENT FUEL TRANSPORTATION

CCNC 4

The Applicant's request for authorization to store source, special nuclear and by-product material irradiated in nuclear reactors licensed under DPR-23, DPR-66, and DPR-71, should be denied as there has been no analysis in the ER of the environmental effects of transportation of radioactive wastes and other material from the other reactors to SHNPP. The Applicants' reliance on 10 C.F.R. 51.20(g), including the table of Environmental Impact of Transportation of Fuel and Waste To and From One Light-Water-Cooled Nuclear Power Reactor (taken from WASH-1238), is inappropriate as the 10 C.F.R. 51.20(g) exemption only applies to the transportation of radioactive material to and from one reactor only, not from several reactors as in this instance. There needs to be a full description and detailed analysis in the ER under 10 C.F.R. 51.20(g)(1)(a)(ii), to include the contribution of such effects to the environmental costs of licensing the reactor, and the environmental impact under normal conditions and the risk from accidents.

CHANGE 9

Applicants' Environmental Report is inadequate because it does not provide a full description and detailed analysis of the environmental effects of the transportation of spent fuel to Shearon Harris from other CP&L plants, the values for such

analysis of the impact under normal conditions of the transport, and the environmental risk of accidents as required by 10 C.F.R. 51.20(g)(1)(a)(ii). The values set forth in summary table S-4 do not apply here because those values apply to the shipment of a reference quantity of spent fuel from a reactor to a reprocessing plant and not those likely to occur with an Away From Reactor storage facility.

EDDLEMAN 25

(The description of how terrorists can breach a spent fuel shipment and harm the public health and safety thereby, from the contention 24 above, is incorporated herein by reference.)

An alternative of less environmental impact than spent fuel shipments from Robinson and Brunswick to Harris needs to be considered, both because of NEPA and because of the unwarranted risks of terrorist activity posed by such shipments which provide numerous almost indefensible targets over long routes and a long period of time for multiple spent fuel shipments.

Such alternatives include re-racking of spent fuel (including the use of poison rods made proof against breakage) spent fuel consolidation (with appropriate measures against accidental criticality, for all alternatives herein), and/or expansion of on-site spent fuel pools at Brunswick and Robinson and any other reactor from which spent fuel might be shipped to the Harris site. A further alternative for both Harris and the other plants referred

to above is to store all waste (spent fuel) on site for the operating life of the plant, and then put it all on one, extremely well-guarded and completely unpublicized) unit train for shipment to a final repository, if one exists then. This alternative as suggested by Dr. Marvin Resnikoff of CRP and others had the advantages of letting the spent fuel's heat and radioactivity decay, over a period of many years for most spent fuel, resulting in less risk to the public from either terrorism or accidents in transporting the fuel both for the reason of less radioactivity in the spent fuel and because a one unit train is less subject to accident or terrorist attack than a large number of train shipments or truck shipments.

NEPA requires that such alternatives be fully considered in the ES. They are not, at least not accurately. And the ER discussion of spent fuel transport is wholly inadequate in that it does not consider these alternatives which reduce the radiological risk, terrorism risk, and/or cost and/or environmental impact of spent fuel going to and from the Harris site. It is not enough to say the impacts fall within Table S-4 limits -- you have to say why, prove it, and also prove that other alternatives are not environmentally superior under NEPA or superior under the common defense provisions of the Constitution and protection of public health and safety as stated in 10 C.F.R. 2 Appendix A VIII (b)(6).

EDDLEMAN 25B

The DEIS has improperly failed to consider the radiological impacts and NEPA alternatives to, and cost-benefit of shipping spent fuel to Harris.

EDDLEMAN 64(D)

The risk and probability of transport accidents for spent fuel are increased by transshipment to Harris -- the more miles you travel with nuclear fuel, the more wrecks are possible and the more other accidents can occur to the fuel in transit. The analysis of section 3.8 of the ER is inadequate in that without basis it claims that the environmental impacts of such shipments will be within those set forth in Summary Table S-4 which clearly states that it is for "One Light-Water Cooled Nuclear Power Reactor" and note 4 to said table (evidently what CP&L relies on) says the accident risk is not capable of being estimated. Sandia Laboratories has published a study (probably more than 1, too) on nuclear waste transport accidents indicating that one involving loss of coolant (e.g. from striking bridge supports or abutments; from ripping in a sideswipe accident with a bus, car, truck, power pole, bridge support, guardrail, light pole, phone pole; from puncture; from crushing the heat sink of the cooling system; from cask flexing if it lands at an angle after a rollover accident; etc) could promptly kill up to 2000 persons with more delayed cancers, etc.

And it is obvious that the more fuel that is moved, the greater the risk; further, the radiological impact of spent fuel shipment in Table S-4 is not covered in footnote 4; thus there is no basis for excluding it under NEPA and AEA.

EDDLEMAN 64(E)

The risks of releasing the 2 million curies (74 billion million radioactive disintegrations per second) in one spent fuel shipment of 0.5 metric ton are underestimated by Applicants and NRC because they do not take account of the new information in the Sandia study referred to in (d) above and in other studies, use no empirical data on waste shipment accidents and frequency of accidents to similar trucks carrying loads of similar dimensions and weight, and do not sufficiently protect the integrity of the cask and coolant in the event of an accident.

EDDLEMAN 126X

The Applicant's Environmental Report should provide a full description and detailed analysis of the environmental effects of the transportation of spent fuel shipments to the Harris Plant from other CP&L Company facilities and of the contribution of such effects to the environmental costs of licensing SHNPP, the values determined for such analysis for the environmental costs being figured into the NEPA cost-benefit balance for SHNPP.