

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

ATOMIC SAFETY AND LICENSING BOARD

'83 FEB 28 A10:26

BEFORE ADMINISTRATIVE JUDGES

James L. Kelley, Chairman
Dr. A. Dixon Callihan
Dr. Richard F. Foster

SECRETARY
& SERVICE
BRANCH

SERVED FEB 28 1983

In the Matter of	}	ASLBP Docket No. 81-463-010L
DUKE POWER COMPANY, <u>ET AL.</u>	}	Docket Nos. 50-413
(Catawba Nuclear Station, Units 1 and 2)	}	50-414
	}	February 25, 1983

MEMORANDUM AND ORDER
(Ruling on Spent Fuel Contentions)

This Memorandum and Order addresses and rules on DES Contentions 10 and 19, as jointly submitted by Palmetto Alliance and the Carolina Environmental Study Group. The background of these contentions will place our rulings in perspective.

DES 19 addresses itself to several different issues. They are: the need for shipping fuel from other Duke reactors to Catawba for storage; the environmental costs and other impacts (including severe accidents) associated with the shipment of spent fuel to Catawba; alternatives to shipping spent fuel from other Duke facilities; and the environmental costs of operating Catawba as a storage facility for spent fuel from other Duke reactors. DES 10, which duplicates a part of DES 19, is concerned with the consequences of transshipment of Oconee and McGuire spent fuel to Catawba.

8303010396 830225
PDR ADOCK 05000413
G PDR

DSO 2

These contentions, filed on September 22, 1982 following issuance of the DES, are not entirely new. Palmetto Alliance's initial petition to intervene, filed December 9, 1981, included (a) Contention 14, which called for "...a full description and detailed analysis of the environmental effects of the transportation of spent fuel shipments to the Catawba Plant from other Duke Power Company facilities..." rather than application of Summary Table S-4 and (b) Contention 15, which asserted that the cost-benefit balance struck at the construction permit stage was compromised by use of Catawba as a "Away-From-Reactor" storage facility for spent fuel from other Duke facilities and by the transportation of spent fuel to Catawba.

This Board rejected Palmetto 14 because we saw no reason why Table S-4 should not apply to the transport of spent fuel to Catawba just as well as to a hypothetical fuel reprocessing plant. Memorandum and Order of March 5, 1982 at 19. We admitted Palmetto 15 on the condition that the words "Away From Reactor" be stricken, and subject to possible revision of this contention after receiving information in response to our questions about the extent of licensing authority sought by the Applicant, our jurisdiction over an application to store or transport spent fuel from other Duke facilities, and the scope of the environmental evaluation of storage and transportation of spent fuel contemplated by the Staff. After review of the responses to our questions, we ruled (Memorandum and Order of July 8, 1982 at 6-7) that "Although ... this Board lacks jurisdiction over shipment of spent fuel from other Duke facilities, we must consider the environmental impacts associated with its transport to, and storage at Catawba." In relation to Palmetto

Contention 15, we stated that, "(w)e need also to confine this issue to the action now before us, which is a license to operate the constructed plant. Palmetto Alliance may resubmit this contention based on the OL Environmental Statement, when issued..." The intent of these words was to exclude any topics that were covered by licenses issued for other plants or to transport companies. Additionally, the intent was to better focus the contentions on the environmental impacts of spent fuel storage at Catawba in light of the Staff's response (April 5, 1982, at 10) that "(s)ince the request for spent fuel storage authority for non-Catawba fuel has been made as part of Applicants' facility operating license application, the environmental impacts that reasonably may be estimated to result from the grant of such authority must be evaluated now and will be incorporated into the overall environmental impact statement on the operating license application to be issued by the Staff." (Emphasis added.)

The wording of the first paragraph of DES 19 is identical to Palmetto's original Contention 15, except that our instruction to strike the words "Away From Reactor" was followed. Unfortunately, the remainder of DES 19 goes against the grain of our advice to confine the contention to the Catawba OL. It instead introduces arguments about whether other Duke plants need to ship their spent fuel for storage elsewhere, the adequacy of the criteria for cask integrity in severe accidents, and alternatives that other Duke plants might use to avoid spent fuel shipments to Catawba. All of these aspects of DES 19 are

again rejected. They are not within the scope of the Catawba OL proceeding.^{1/}

At the second prehearing conference there was considerable discussion of whether the environmental cost of shipping Oconee and McGuire spent fuel to Catawba was covered by Table S-4 of 10 CFR 51.20 (Tr. 525-552). At that time the Staff was under the impression that the proposed volume of shipments was substantially greater than the 60 per year per reactor used as a basis for Table S-4. This was the reason that the Staff had made a separate "appraisal"^{2/} of the consequences of such shipments to Catawba and had included that appraisal in the August 1982 DES as Appendix G. The Applicants maintained that Table S-4 adequately covered the shipments, that Appendix G was unnecessary, and that Contentions DES 10 and 19 were an attack on Commission regulations (Tr. 540; Applicants' Response to Supplement to Petition to Intervene, October 4, 1982, at 34, 56). Following the second prehearing conference and before the Board had issued its Order of December 1, 1982, the

^{1/} Even assuming that they might be viewed as within the scope of this proceeding as proximate consequences of operating licenses for Catawba, they would be of no concern unless shown to result in significant environmental impacts. The insignificant impacts described in Table S-4 lay that concern to rest, since there has been no showing, or even any claim, that any specific incremental impacts beyond Table S-4 would be involved. In these circumstances, no analysis of the need for the proposed action -- here, transshipment of spent fuel -- or alternatives to that need are required. See Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263 (1979).

^{2/} Although Appendix G is called an Environmental Impact Appraisal, it does not serve that role as specified in 10 CFR 51.7.

Applicants moved to defer a ruling on DES 10 and 19 so that the parties might have an opportunity to restate their position. The Staff supported the Applicants' motion. We granted this motion in our Order of December 1, 1982. After reviewing the pleadings filed on this motion, we now reconsider the applicability of Table S-4 in this proceeding to the shipments of spent fuel from Oconee and McGuire for storage at Catawba .

As pointed out by both the Applicants and the Staff, the environmental costs associated with the shipments of spent fuel from Oconee and McGuire have already been taken into account and balanced against the benefits that those facilities will provide. In the case of Oconee, this was done in the FES issued March 1972 (prior to the existence of Table S-4). For McGuire it was by application of Table S-4. These environmental costs should not now be counted a second time. See Northern States Power Co. (Prairie Island Nuclear Plant), ALAB-455, 7 NRC 41, 46, n.4 (1978). Having said that, it must be recognized that the environmental costs which were factored into those earlier proceedings were estimated on the basis of the full span of time and distance from when the fuel leaves the "home" reactor until it reaches a fuel reprocessing plant. The trip to Catawba represents only the first segment of the full journey. If the temporary diversion of the fuel to Catawba causes the total environmental impact for the full journey to be greater than that of a 1-step direct trip to a reprocessing plant, and if the impact of the diverted 2-step trip is appreciably greater than that previously taken into account (by use of Table S-4), then the new

additional costs should be considered in the Catawba OL proceedings now before us.

On the basis of information originally supplied by the Applicants about the potential volume of spent fuel shipments to Catawba, the Staff concluded that the assumptions used in WASH-1238 to arrive at the values published in Table S-4 would be substantially exceeded. Because of the projected additional impact, the Staff prepared Appendix G for the DES. However the Applicants thereafter stipulated that "...it is Duke's intention that any such shipments will be made so that their environmental impacts will be encompassed within the values contained in Table S-4" (Letter of November 2, 1982 to the Staff). In response to this new information the Staff's FES, issued January 1983, has a replacement Appendix G which relies on Table S-4 and which states: "Because no new environmental impacts are introduced by the proposed transshipments and because the environmental impacts of transporting spent fuel from McGuire and Oconee have already been factored into the licensing of those facilities, no environmental impacts for spent fuel transport have been factored into the cost-benefit balancing for Catawba."

In view of Applicants' stipulation that the environmental impacts of fuel shipment 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. If the Intervenor believe that they can make a prima facie showing that Table S-4 should not apply, identifying with reasonable specificity the environmental impacts that are not adequately accounted for by Table S-4, they may file a petition under 10 CFR 2.758 setting forth the special circumstances which would justify a waiver of the rule.

We might assume, for the sake of argument, that there could be some incremental environmental impacts associated with the transshipment phase that are not accounted for in the earlier environmental reviews. But even under that assumption, an intervenor would be required to identify those impacts in a proposed contention with "reasonable specificity." DES contentions 10 and 19 do not identify any such incremental impacts; rather, they refer in general terms to the environmental consequences of transshipments and to the possibilities of

accidents.^{3/} They accordingly lack the requisite specificity and are also rejected on that alternative basis.

There remains the part of DES 19 relating to evaluation of the environmental costs of operation of Catawba as a storage facility for spent fuel from other nuclear facilities. When Palmetto 15 (a predecessor contention) was first submitted, we indicated that we would admit its corresponding part (Memorandum and Order, March 5, 1982, with restrictions as set forth in Memorandum and Order of July 8, 1982), subject to our evaluation of certain information and the environmental

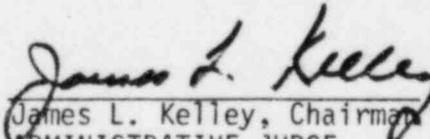
^{3/} In view of the fact that the Table S-4 values were based on an assumption that the spent fuel would travel 1000 miles in 3 days to a fuel reprocessing plant, we seriously doubt that a short trip -- for example, of the less than 50 miles from McGuire to Catawba -- could carry with it any significant increased risk of accidents. In adopting Table S-4, the Commission indicated that its values should be applied unless factors (e.g., distance) in a particular case were "much greater" than those used in developing the Table. 40 Fed. Reg. 1005, 1007 (1975). Similarly, it appears to us that Table S-4's value for exposures to transport workers would not be compromised by the short transshipments contemplated here. The only area of Table S-4 that appears to us to be impacted by the proposed transshipments is the dose to some individuals living close to the roadways that would carry the truck traffic. The chances of added exposure would especially increase for those individuals who live or work on portions of the highway used by truckers converging from both Oconee and McGuire. But as we read Table S-4 and its supporting documentation, even the members of the public who would be most exposed would receive only de minimis doses (e.g., at most a few millirem), doses that could not possibly affect an NEPA cost/benefit analysis. See Southern California Edison Co. (San Onofre Station), ALAB-308, 3 NRC 20, 28, n.9 (1976).

impact statement. We now admit this portion of DES 19, which reads as follows:

"Failure to evaluate the environmental costs of operation of Catawba as a storage facility for spent fuel from other Duke facilities compromises the validity of the favorable cost-benefit balance struck at the construction permit phase of this proceeding. Since the CP stage hearing, Duke Power has considerably expanded the Catawba spent fuel pool capacity and provided for denser storage of irradiated fuel. FSAR Table 1.2.2-1. Applicants intend to use Catawba for storage of irradiated fuel from the McGuire and Oconee nuclear facilities of Duke Power Company. FSAR 9.1.2.4; OL Application, pp. 11-12."

This contention is worded in rather general terms. This is due in part to the fact that the FES contains very little analysis of environmental impacts associated with the spent fuel pool. FES 5-19. DES 19 complements Palmetto 16, which concerns safety of storage of spent fuel transshipped from Oconee and McGuire. The Board understands in admitting it that the primary focus of DES 19 would be on the environmental effects of routine releases from such transshipped fuel during normal operations at Catawba. Although the contention literally extends to environmental effects of severe accidents, there would be no reason to consider such effects unless it were first shown that severe accidents are credible in the spent fuel pool designed for Catawba.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD


James L. Kelley, Chairman
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland,
this 25th day of February, 1983.