UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
Duke Power Company	)	Docket No. 70-2623
	)	
(Amendment to Materials License SNM-1773 for Oconee Nuclear Station Spent Fuel Transportation and Storage At McGuire Nuclear Station)	)	

APPLICANT'S RESPONSE TO NRDC'S "PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE FORM OF AN INITIAL DECISION"

On May 29, 1980, Natural Resources Defense Council ("NRDC") filed its "Proposed Findings Of Fact And Conclusions Of Law In The Form Of An Intial Decision" ("NRDC's Proposed Findings") in the captioned proceeding. Therein, NRDC, in concluding that the requested licensing amendment should be denied, addressed three issues relevant to this proceeding: (1) "The Commission's Five-Factor Balancing Test" (NRDC's Contention 1); (2) "NEPA" (NRDC Contention 2); and (3) "ALARA" (NRDC Contention 4). Pursuant to 10 CFR §2.754 and consistent with the schedule approved by this Atomic Safety and Licensing Board ("Licensing Board") (Tr. 4117-8) Applicant submits the following response.

A. The Commission's Five-Factor Balancing Test

NRDC maintains that weighing and balancing the factors set forth by the Commission 1/ in its guidance relative to interim licensing actions designed to ameliorate shortages of spent fuel storage leads to the conclusion that the instant application should be denied pending final Commission action on the NRC's "Final Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel" ("GEIS"). 2/ (NRDC's Proposed Findings at p. 30). As set forth in "Applicant's Proposed Findings of Fact and Conclusions of Law in the Form of an Initial Decision at pp. 15-24 (May 19, 1980) ("Applicant's Proposed Findings"), Applicant takes issue with NRDC's position.

At the outset, it is clear that in weighing and balancing the five factors, each are to be considered of equal weight. 3/ See Portland General Electric Company (Trojan Nuclear Plant) ALAB-531, 9 NRC 263 (1979), wherein the Atomic Safety and Licensing Appeal Board ("Appeal Board") stated:

1/ See 40 Fed. Reg. 42801, 42802 (September 16, 1975) wherein these five factors are enumerated.

2/ Although the NRC Staff issued its GEIS in August 1979, the Commission has yet to act.

3/ To the extent that NRDC holds the position that four of the five factors are to be given greater weight (NRDC's Proposed Findings at p. 14), NRDC's position is contrary to relevant case law.

> To begin with, the notice does not purport to assign relative orders of weight to the five factors; rather it simply instructs that each be "applied, weighed, and balanced in determining whether to authorize pool capacity expansion in advance of the issuance of the GEIS. Had the Commission intended to make the fifth factor dispositive, it is reasonable to suppose that it would have said so. [9 NRC at 270-71].

With respect to weighing and balancing the individual factors, 4/ NRDC maintains that the first factor weighs against granting of the proposed licensing amendment in that the proposed action would not have a utility that is independent of the utility of other licensing actions of this type. (NRDC's Proposed Findings at p. 14). In arriving at this conclusion, NRDC submits that (1) the proposed action is a step in a larger "cascade plan" and is so related to that larger plan that without it there would be "little" utility in taking the proposed action, and (2) the proposed action is so dependent upon the use of a future government away-from-reactor storage facility ("AFR") that without such use there would also be "little" utility in the proposed action. Id. 5/ NRDC's position with respect to this issue is

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4/ Although NRDC now chooses to address all of the factors, its Contention 1 refers only to the first two of the five factors.

5/ NRDC also raises in its discussion of independent utility, the foreclosure of alternatives, and the immediate need of the proposed action to avoid shutdown of the reactor. (NRDC's Proposed Findings at p. 15). These issues are addressed in the discussions of factor 2, infra, related to foreclosure of options, and factor five, infra, related to immediate need of the action.

not supported by the evidence. It cannot be questioned that regardless of whether an AFR is ever constructed or whether Applicant ever seeks another licensing amendment to transship spent fuel, the proposed action clearly provides the three Oconee units approximately 2 1/3 years of additional storage space for its spent fuel. (Tr. 415; NRDC's Proposed Findings at p. 16).

In attempting to overcome this convincing fact, NRDC argues that since the proposed action will not bridge the gap between interim storage of spent fuel and the availability of permanent storage facilities, it is without independent utility. Applicant submits that of every approved spent fuel storage option of which Applicant is aware, none was required to "bridge the gap" to final resolution of the waste storage question (e.g., Dairyland Power Cooperative (La Crosse Boiling Water Reactor) LBP-80-2, 11 NRC 44 (1980); Portland General Electric Company (Trojan Nuclear Plant) ALAB-531, 9 NRC 263 (1979); Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2) and Vermont Yankee Power Corporation (Vermont Yankee Nuclear Station) ALAB-455, 7 NRC 41 (1978); Duke Power Company (Oconee Units 1 and 2) (Tr. 569).

In sum, Applicant maintains that NRDC's position that the proposed action has little independent utility is

unsupportable and, to the contrary, the proposed action does have a utility independent of other interim storage actions of this type. (See Applicant's Proposed Findings at pp. 21-24).

With regard to the second factor, would the proposed action "constitute a commitment of resources that would tend to significantly foreclose the alternatives available with respect to any other individual licensing action of this type" (40 Fed. Reg. at 42802), NRDC maintains that approval of the proposed action would tend to significantly foreclose alternatives thereto. (NRDC's Proposed Findings at 18). In support of this position NRDC first maintains that approval of the proposed action would promote reliance on the so-called "cascade plan" and discourage timely investigation of alternative solutions. Id. 6/ In short, the record does not support this position. Applicant has continually maintained that it is not committed to a "cascade plan," but rather seeks a flexible approach, considering all possible alternatives in attempting to resolve its spent fuel storage problem. (Tr. 417-8, 424, 438, 443-4, 452-3,

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6/ Applicant notes an inconsistency in NRDC's position. In support of its argument regarding foreclosure of options NRDC states that Applicant has not thoroughly examined the option of reracking either Oconee or McGuire with poison racks. (NRDC's Proposed Findings at p. 17). This is contrary to the evidence as noted herein. To support its argument regarding a need for the proposed action, NRDC states Applicant's expressed intention to install poison racks. (NRDC's Proposed Findings at p. 16, note 13).

475-7, 486-88, and 565). Indeed, rather than pursuing approval of additional shipments, Applicant has recently undertaken high density reracking of its Oconee Units 1 and 2 spent fuel pool and is currently in the process of seeking an amendment to its Oconee license to authorize installation of poison racks at Oconee Units 1 and 2 pool. (Applicant's Exhibit 30). 7/ Further, Applicant is continually evaluating existing and new technology with respect to spent fuel storage (e.g., construction of an independent spent fuel storage installation ("ISFSI") (Applicant's Exhibits 1 and 23B), and pin compaction. (Applicant's Exhibit 3 at p. 8; Tr. 857 and 1155-6)).

In support of its position regarding foreclosure of alternatives, NRDC also maintains that approval of the proposed action would "encourage Applicant to allow construction at McGuire, Catawba, Cherokee, and Perkins to continue without maximum reracking at those facilities and without maximum expansion of spent fuel pool capacity there" 8/

7/ Applicant has recently testified that its current, tentative, intentions are to transship the 300 assemblies to McGuire unit 1, seek approval to rerack both Oconee pools with poison racks and seek approval to rerack the McGuire unit 1 pool with poison racks. (Tr. 4762). In this manner both McGuire and Oconee will have sufficient storage space until the early 1990's. (Id.)

8/ Applicant notes that the transcript cites given by NRDC to support this positon have little bearing on the position.

and "discourage timely investigation" of use of an ISFSI. (NRDC's Proposed Findings at 18). 9/ Applicant maintains that it has not foreclosed options at any of its plants. Both Catawba units and McGuire unit 2, are now scheduled to contain high density racks. (Tr 860). With respect to McGuire unit 1, Applicant has stated its intent to install poison racks. (Tr. 4762). With respect to Perkins and Cherokee, these units are not scheduled to come on line until the late 1980's or early 1990's (Staff Exhibit 22) and thus, Applicant views extensive commitments regarding these units as premature. Further, Applicant notes that, contrary to NRDC's position, it has conducted extensive investigations regarding the ISFSI option and is not precluded from selecting this option in the future. (See Applicant's Proposed Findings at pp. 31-32).

In sum, Applicant maintains, and the record supports, that the proposed action would not constitute a commitment of resources that would tend to significantly foreclose the alternatives available with respect to any other individual licensing actions of this type, and thus factor 2 weighs in favor of granting the proposed licensing amendment. 10/

With respect to the third factor, whether any environmental impacts associated with the proposed shipment could adequately be addressed within the context of the individual

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9/ To the extent that NRDC is attempting to change the standard from "tend to significantly foreclose" to "encourage" and "discourage," NRDC must fail.

10/ Applicant notes that the proposed action does not foreclose other options any more than approval of a reracking or an ISFSI option.

licensing application without overlooking any cumulative environmental impacts (40 Fed. Reg. at 42802), NRDC maintains that approval of the proposed action would unavoidably lead to future intra-system transshipments, and thus the cumulative environmental impacts of these future intra-system transshipments must be considered. (NRDC's Proposed Findings at p. 19). Applicant maintains that NRDC's position is unsupportable. It is clear that approval of the instant action does not irretrievably commit Applicant to pursue a course of specific future intra-system transshipments. Indeed, from Applicant's testimony and actions, as noted herein, it is clear that Applicant is pursuing several potential options. In addition to Applicant's flexibility, approval of the instant action will not unavoidably result in future NRC approval of other licensing amendment requests regarding transshipment. As the NRC Staff stated, "taking this action [approval of the instant request] would not necessarily commit the NRC to repeat this action or a related action at a later date." (Staff Exhibit 3 at p. 63).

With regard to any cumulative impact of the proposed action itself, the NRC Staff has extensively analyzed the proposed action and concluded that the environmental impacts associated therewith are negligible. (Staff Exhibit 3 at p. 63-64). Thus, Applicant maintains that Factor 3 weighs in favor of granting the proposed licensing amendment request.

With respect to Factor 4 (i.e., the likelihood that any technical issues that may arise in the course of the review of the license application can be resolved within that context (40 Fed. Reg. at 42802)), Applicant concurs with NRDC that the proposed action does not present technical issues that cannot be resolved in this proceeding. (NRDC's Proposed Findings at p. 14 n. 11).

With respect to the fifth and final factor, whether deferral or severe restriction on licensing actions of this type would result in substantial harm to the public (40 Fed. Reg. at 42802), NRDC maintains that in light of the completion of installation of high density racks at the Oconee units 1 and 2 pool, there will be sufficient spent fuel storage capacity for the Oconee units until at least September 1982, and thus this fifth factor weighs against approval of the instant application. (NRDC's Proposed Findings at p. 20). Further, NRDC states that the average capacity factors and the average forced outage times for the Oconee units when projected into the future may well extend this September 1982 date. (Id.) 11/ Applicant notes that with the exception of installation of poison racks at the Oconee units 1 and 2 pools, for which Applicant intends to seek approval, the instant action is the only alternative that can be implemented which will assure adequate spent

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11/ In response to this speculative observation, based on the evidence, Applicant notes that projecting these factors into the future would result in an extension of the September 1982 date by approximately 2-4 months.

fuel storage space for continued operation of the Oconee units with a full core reserve beyond September 1982. (See Applicant's Proposed Findings at pp. 32-33). As previously stated, Applicant is anticipating filing an application to rerack the Oconee units 1 and 2 pool with poison racks. (Applicant's Exhibit 30). However, if either approval of that application 12/ or installation of the poison racks are significantly delayed, the Oconee units will have to shut down for lack of spent fuel storage space unless the instant application is approved. Thus, Applicant maintains that disapproval of the instant licensing amendment request could result in substantial harm to the public interest by causing the shutdown of the Oconee units due to lack of spent fuel stor e. The Appeal Board in Trojan Nuclear Plant, supra, in clarifying the Commission's fifth factor stated that "the Commission's purpose was not to restrict. . . authorizations to those situations in which, absent such an authorization, the reactor would have to shut down immediately for want of available onsite spent fuel storage space." 9 NRC at 270. Further, the Appeal Board noted that the Commission expressly provided that Factor 5 should take into consideration those actions which, if deferred, "could result in reactor shutdowns." (40 Fed. Reg. at 42802). The Appeal Board thus concluded that

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12/ With respect to licensing uncertainties, Applicant notes that this proceeding has been pending since 1978.

"this language scarcely comports with the notion that full capacity expansion is to be permitted only in circumstances where needed to avert an immediate crises." In that the proposed action, if not approved, could result in a reactor shutdown in late 1982 due to lack of FCR, the fifth factor weighs in favor of granting the Applicant's instant request.

B. NEPA (NRDC's Proposed Findings at pp. 22-24)

NRDC maintains that the NRC Staff erred in limiting its analysis to the environmental impact associated with the proposed action. NRDC maintains that since an unavoidable consequence of approval of the proposed action is future intra-system transshipments and since the proposed action has no independent utility, NEPA mandates a broader environmental analysis to include as the proper scope of the environmental review the entire so-called "cascade plan" and alternatives to it. (NRDC Proposed Findings at pp. 23-24). As Applicant has discussed previously, the proposed action does not lead unavoidably to future intra-system transshipments. In addition, as previously discussed, the proposed amendment request has independent utility in that it will provide 2 1/3 additional years storage space for the three Oconee units. In sum, NRDC has failed to provide a factual basis for its position that the proper scope of analysis as to the environmental impact of the proposed alternative is other than only the proposed alternative itself and

reasonable alternatives thereto. (See Applicants Proposed Findings at pp. 61-73).

C. ALARA (NRDC's Proposed Findings at pp. 25-27)

NRDC maintains that Commission regulations regarding the as low as reasonably achievable ("ALARA") criterion, (e.g., 10 CFR §20.1(c)) require a detailed ALARA analysis and comparison of the proposed action and all alternatives thereto. (NRDC's Proposed Findings at p. 25). In addition, NRDC maintains that the scope of the proposed action, here, is the so-called "cascade plan". (Id.) In that neither the Applicant nor the NRC Staff has conducted such an analysis with respect to the so-called "cascade plan" and alternatives to that plan, NRDC maintains that the ALARA analyses conducted by the Staff and Applicant are deficient. (Id.)

In support of its position that the proper scope of analysis is the so-called "cascade plan," NRDC reiterates that approval of the instant application leads unavoidably to the entire so-called cascade plan. (NRDC's Proposed Findings at p. 26-27). As Applicant has previously noted, this position is totally without merit and must be summarily rejected.

With respect to NRDC's contention that ALARA requires a detailed analysis of each reasonable alternative to the proposed action, Applicant maintains that the ALARA criterion only requires a detailed analysis of the proposed

action, and not all the alternatives to the proposed action. (See Applicants Proposed Findings at p. 34-37). In support of its positon, NRDC cites the Appeal Board's ruling in Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-455, 7 NRC 41, 56 (1978) for the proposition that ALARA requires an examination of alternatives. However, Prairie Island does not stand for this proposition. Analyzing the Licensing Board decision which gave rise to the Prairie Island decision, it is clear that the Licensing Board considered Commission regulations regarding ALARA as mandating "reasonable assurance that the applicant will perform the proposed modification in a manner that meets the requirements [set by] 10 CFR §20.1 [ALARA] . . . " (emphasis supplied) LBP-77-51, 6 NRC 265, 282 (1977). In sum, the Licensing Board in Prairie Island, consistent with Applicant's view, was considering whether the radiation exposure related to a single specific proposed modification, rather than a range of potential modifications, met the ALARA criterion. It was this issue that was taken to the Appeal Board, and it was this issue that gave rise to the Appeal Board citation used, incorrectly, by NRDC to stand for the proposition that ALARA requires an evaluation of alternatives to the proposed action.

With respect to the Application of the ALARA criterion to the proposed action itself, the record demonstrates that

such has been satisfied. (Staff Exhibit 11A at pp. 4-6; Applicant Exhibit 2 at p. 9-1; Tr. 1715-19 and 2530-31). With respect to consideration of the radiation exposures associated with all the alternatives, including the proposed action, they have likewise been considered. (See Applicant's Proposed Findings at pp. 39-42). Inasmuch as they are all in the same general dose range and, because of the nature of the estimating process, there would be no basis for concluding that any of the viable alternatives was preferrable from the standpoint of radiation risks. 13/

From the foregoing, Applicant maintains that the proposed action does meet the ALARA criterion and that doses associated with the alternatives have been adequately considered. 14/

13/ NRDC also questions the variation between Applicant and Staff's calculations regarding the total dose from the various alternatives. Applicant notes that the major variation was in the estimates regarding installation of high density and poison racks. (Applicant's Exhibit 15 and Staff Exhibit 11A). However, subsequent to such testimony, as a result of actual experience, Applicant's estimate has been reduced to be more in line with that of the Staff's. (Tr. 1717, 1764, 1760, 1765, 2539, 4751). In any event, testimony clearly established that the risk of health effects associated with any of the options is very small. (Applicant Exhibit 12 at p. 13; Staff Exhibit 10A at p. 4; Tr. 1429-31, 1446-47 and 413-16).

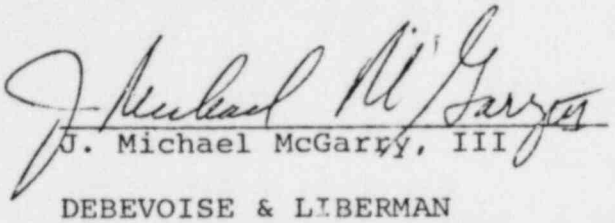
14/ NRDC raises "Other Considerations" pertaining to the "reasonable assurance that the spent fuel generated will be able to be safely and permanently disposed of before the end of the operating life of the reactor generating it, or that the storage provided for it at

(footnote continued on following page)

D. Conclusion

From the foregoing, Applicant maintains that each contention raised by NRDC has been properly addressed and resolved on the record, and, that no good reason has been presented for not approving the instant application.

Respectfully submitted,



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(footnote continued from previous page)

14/ the reactor site will be safe until such permenant disposal is available, citing State of Minnesota v. NRC, 602 F.2d 412 (D.C. Cir. 1970)." (NRDC's Proposed Findings at p. 28). As NRDC recognizes, the Commission "has directed licensing boards to continue to consider proposals such as the one before us, pending completion of the rulemaking proceedings to consider the issues remanded by the Court of Appeals. 'Notice of Proposed Rulemaking,' 44 Fed. Reg. 61372, 61373 (Oct. 21, 1979)." (Id.) Accordingly, to continue to approve licensing amendments regarding spent fuel storage is not contrary to the Commission's direction or the Court of Appeals case, Minnesota v. NRC, supra, giving rise thereto. (See also Applicant's Proposed Findings at pp. 68-73).

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CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicant's Response To NRDC'S 'Proposed Findings Of Fact And Conclusions Of Law In The Form Of An Initial Decision'" dated June 13, 1980, in the above-captioned matter have been served upon the following by deposit in the United States mail this 13th day of June, 1980:

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