DUKE POWER COMPANY
P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

February 14, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief
Licensing Branch No. 4

Re: McGuire Nuclear Station, Unit 2
Docket No. 50-370

Dear Mr. Denton:

Attached is a letter from Duke Power Company to the U. S. Department of Energy (DOE) dated February 8, 1983 which provides three copies of Duke Power Company's comments on the proposed Contract for Disposal of Spent Nuclear Fuel and/or High Level Radioactive Waste. In addition to providing comments on the proposed contract, the attached letter also affirms Duke Power Company's intention to execute the required agreement with DOE as specified in Section 302(b) of the Waste Act of 1983.

This letter is being provided to the NRC in advance of the anticipated notice from DOE to the NRC advising the NRC of Duke Power Company's "good faith negotiating" with DOE in order to allow the NRC to proceed with necessary actions for licensing of McGuire Nuclear Station, Unit 2.

Please advise if there are any questions regarding this matter.

Very truly yours,

Hal B. Tucker by PKB

Hal B. Tucker

B001

ADD:
M. Williams

GAC/php
Attachment

cc: (w/attachment)
Mr. W. T. Orders
Senior Resident Inspector
McGuire Nuclear Station

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

cc: (w/attachment)
Mr. R. A. Birkel
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. J. M. Cutchin
Office of Executive Legal Director
U. S. Nuclear Regulatory Commission
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Mr. W. J. Olmstead
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February 8, 1983

Mr. Robert Morgan, Project Director
Nuclear Waste Policy Act Project Office
U. S. Department of Energy
1000 Independence Avenue, S. W., Room 7B-084
Washington, D. C. 20585

Subject: Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste (48 F. R. 5458; Friday, February 4, 1983; 10 CFR 961) Preliminary Comments

Dear Sir:

Duke Power Company appreciates the opportunity to provide the enclosed preliminary comments on the subject proposed Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste. Ten copies of these comments are provided as requested in the Federal Register notice.

As you know, these comments are being provided substantially in advance of the date (March 7, 1983) called for in the Federal Register notice. As noted below, we have prepared and submitted these preliminary comments to enable DOE to provide information to the NRC pursuant to Section 302 (b) (ii) of the Waste Act. We hope that these early comments will be useful to the Department in meeting the tight schedules for contract execution mandated by P. L. 97-425; the Nuclear Waste Policy Act (Waste Act). Although we are covering here most of the major substantive issues with which we believe we must deal in executing a final agreement, we do wish to reserve the right to amend, or expand, these comments during the comment period provided pursuant to the Federal Register notice.

Section 302 (b) of the Waste Act provides in pertinent part that "[t]he [Nuclear Regulatory] Commission shall not issue or renew a license to any person to use a utilization or production facility under the authority of Section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134) unless - (i) such person has entered into a contract with the Secretary [of Energy] under this section; or (ii) the Secretary affirms in writing that such person is actively and in good faith negotiating with the Secretary

for a contract under this section." We are scheduled to load fuel in Unit 2 of our McGuire Nuclear Station on March 1, 1983. Therefore we seek the grant of an operating license for that unit from the NRC on or before that date. As you can see, prior to that date DOE must affirm to NRC that Duke and DOE are engaged in good faith negotiations for a contract under the section of the Waste Act.

We believe that the preliminary comments submitted on the DOE proposal constitute such good-faith negotiations on the part of Duke, and we would request that, at the earliest possible date, DOE affirm, in writing, that Duke and DOE are actively involved in such good-faith negotiations. However, if further input is required from Duke Power Company in order that the Department be able to render the aforementioned affirmation to the Commission, please advise us immediately. We look forward to completion of negotiations with the Department, and hereby state our intention, upon completion of such negotiations, to execute the requisite agreement for disposal services on or before the date specified by the Act.

If there are questions regarding this submittal, please contact Mr. R. Greg Snipes, Nuclear Production Department, Duke Power Company, P. O. Box 33189, Charlotte, North Carolina 28242 (Phone 704-373-8704). Thank you for your consideration.

Very truly yours,

H. B. Tucker
Vice President
Nuclear Production Department

HBT/two

Contract for Disposal of Spent Nuclear
Fuel and/or High-Level Radioactive Waste
(48 F. R. 5458; Friday, February 4, 1983; 10 CFR 961)

Duke Power Company
Preliminary Comments
February 8, 1983

General Comments

First, it is extremely important that the contract be fully reflective of the intent of the Nuclear Waste Policy Act (P.L. 97-425), hereafter referred to as "the Act." This necessitates that the contract provide that DOE accept for transportation and disposal all spent fuel and/or high level waste produced by the facilities covered by the contract. The responsibilities of the Purchaser should be simply to pay the prescribed fees and deliver, f.o.b. carrier at the Purchaser's designated site, spent nuclear fuel (SNF) or high-level water (HLW) in such configuration as can be handled and transported in accordance with all regulatory requirements.

Further, the fees to be established should be in keeping with the concept of full cost recovery. More specifically, payments to be made into the Waste Fund should be used only to defray those costs defined in Section 302 (d) of the Act. Use of this fund for purposes other than disposal-related activities is explicitly contrary to the Act.

Second, given the magnitude of the Civilian Radioactive Waste Management Program and the Waste Fund supporting it, we believe it is appropriate that the Purchaser be granted audit rights regarding DOE expenditures from the fund and access to decision-making information. The precise role of the Purchaser in this area needs to be well thought out and precisely defined. We would reserve further comment on this point until a later date, except to remark that the alternative program management study mandated by Section 303 of the Act might be the place to better define this role.

Third, inasmuch as there will be a much greater inventory of SNF and/or HLW existent at the time of commencement of operation of the first repository than can be received on a short time schedule, an equitable ranking of priority from Purchaser to Purchaser must be established. The contract as drafted provides priority on the basis of age, i.e., time from discharge from the reactor to delivery to DOE, with a special priority given to fuel which needs to be removed from the plant site such that decommissioning activities can begin. On first thought, we believe this is a logical approach. However, we would specifically request the opportunity, should we so desire, to propose during the comment period alternative ranking schemes which would ensure that each Purchaser be allotted some space at the repository during each year of repository operation.

Further to this point, we believe it particularly desirable that the contract provide the opportunity for Purchasers to swap allotments between and among themselves, up to the point of setting the final delivery schedule, and subject to DOE approval as to the feasibility of shipping arrangements. In our view this would take considerable pressure off of DOE itself in responding to requests for emergency deliveries.

Fourth, it is important from the standpoint of spent fuel storage planning that uncertainty be reduced as to the possibility of storage requirements peaking after 1998. This would be the case if the initial repository receipt rate were less than the rate of spent fuel generation as of 1998. Therefore, we believe DOE should design the first repository and the associated front-end facilities in such a way that initial receipt rates are at least equal to the rate of spent fuel generation. This intent should be embodied in contract language.

Fifth, we endorse the concept of a simple, industry average dollars per kilogram charge on prior spent fuel. The simplicity of this approach makes it highly desirable in terms of dealing with public utility commissions, in keeping with the rationale of the ongoing mil per kilowatt hour charge. While we understand DOE is to provide additional information regarding the working of Article VIII.A.2 of the draft contract, our initial reaction is that a different dollar per kilogram charge for fuel in different burnup ranges is overly burdensome and not in keeping with the simple intent of the Act.

As a possible compromise, we believe the following procedure might merit consideration: Inasmuch as the ongoing mil per kilowatt hour charge will, as we understand it, provide adequate funding for the waste program over the next several years, without resort to borrowing, the Purchaser could be offered two options regarding the determination of the one-time fee for prior fuel. The first option could be the 1 mil per kilowatt hour charge applied to the industry average burnup value, and spread over all kilograms of spent fuel discharged from civilian reactors as of 4/7/83. The second option could be a mil per kilowatt hour charge applied on a fuel assembly by fuel assembly basis. The Purchaser would be allowed to choose the lower value.

While admitted not contemplated by the Act, this procedure could assuage the feelings of any Purchaser that he was being adversely treated by the application of a single fee calculation method. Further, any monetary shortfall resulting from the application of such options would be compensated for by future adjustments of the mil per kilowatt hour ongoing charge. We may wish to comment further on this point at a later date.

Sixth, we note that DOE contemplates future adjustment, not only of the ongoing mil per kilowatt hour charge, but also of the dollar per kilogram fee for prior spent fuel. Although Section 302 (a) (4) of the Act is somewhat ambiguous on this point, we believe it was the intent of Congress that all adjustments apply to the ongoing charge, not to the one-time fee. We do believe, however, that under our interpretation of the intent of the Act, finance charges to time of payment would be appropriate.

Failing this interpretation of adjustability of the fee for prior fuel, at the very least we expect that some payment option be provided which fixes, once and for all, the fee for prior fuel as of the time the Purchaser commences payment of this fee to DOE. This we believe has been incorporated into Article VIII B.2.(a) of the proposed contact.

Finally, although it is not clear from the language of the proposed contract, we believe that we should enter into but one agreement for disposal of SNF and/or HLW for all reactors which we own or operate. We do not currently have reason to suspect that DOE thinks otherwise.

Section-by-Section Comments

Article I- Definitions

Definition 1 - Assigned Three-Month Period. In line 1, change "the period" to "each period" and "each Purchaser" to "the Purchaser."

Definition 12 - Full Cost Recovery. In lines 7 and 8, delete "and all other uses specified in the Act, such as, but not limited to," and insert the word "including."

Definition 17 - Shipping Lot. In line 2, insert the word "beginning" after the word "DOE."

Definition 18 - Spent Nuclear Fuel. In line 2, insert after the word "irradiation" the phrase, "without intent to reinsert." The major concern here is that if, for instance, a reactor has to offload a full core to correct an operational problem, that fuel should not be considered SNF for the purposes of this agreement.

Article III - Term

Modify this article as follows. In line 1, insert the phrase "and shall continue" after the word "execution." In line 2, delete the phrase "DOE has accepted" and insert the word "all." Add at the end of the existing article the phrase "has been disposed of as provided for in this contract."

Article IV - Delivery of SNF and/or HLW

Paragraph B 1st Sentence. A mechanism needs to be established which triggers the first submittal of Appendix B. Once triggered, submittals would be made annually thereafter. Assuming the first year DOE will accept fuel for disposal is FY1998, the first submittal of Appendix B information should be made on or before July 1, 1992 (63 months prior to the beginning of FY1998).

Paragraph B Last Sentence 1st Paragraph. Since Appendix B does not specify month of delivery, we assume the intent is to allow delay of some reasonable portion of a year's delivery commitment into the first 2 months of the subsequent fiscal year.

Addition at the end of Paragraph B. DOE should allow exchange of allotments among utilities up until time of finallization of the delivery schedule, subject to DOE's transportation constraints. See our general comments. The suggested language is:

"Purchasers may exchange delivery commitments with other owners and generators of SNF and/or HLW of domestic origin from civilian nuclear power reactors prior to submittal of the final delivery schedule by Purchaser subject to the approval of DOE, which approval shall not be unreasonably withheld."

Paragraph C. We interpret the language to mean:

(1) A separate Appendix C must be submitted for each shipping lot, or campaign, for each site.

(2) The required date for submittal of each Appendix C is determined by backing off 12 months from the beginning of the shipment window for each lot - not from the beginning of the delivery commitment fiscal year. Please confirm this understanding.

Article V - Responsibilities of the Parties

Paragraph A.1.(a). It seems somewhat unreasonable to require Appendix D - type information as early as October 1, 1983. We would suggest such submittals begin October 1, 1987 (essentially 10 years before repository operation).

We would assume that after the first submittal of Appendix D, which would bring DOE up to date on historic discharges, subsequent October 1 submittals need cover only the prior year's actual discharges, as well as a new 10 year projection. Please confirm.

Paragraph A.2.(a). Fourth line. Need the notification contain anything other than the commencement date for the preparatory activities?

Paragraph B. DOE's primary responsibility, is the obligation to accept for transportation and disposal all SNF and/or HLW generated by the facilities covered under the agreement and properly described and prepared for shipment as specified in Article VI. This does not appear in the list of DOE responsibilities.

Paragraph B.1. 90 day approval of final delivery schedule is inconsistent with Article IV.C which states 45 days.

Paragraph B.2. Delete period at end of paragraph and insert "and shall be in compliance with the requirements of all regulatory authorities having jurisdiction. DOE shall be responsible for all normal maintenance and repair of such casks."

Paragraph B.3. Add "f.o.b. carrier" at the end of the first sentence.

Paragraph B.6. See general comments. Although this seems one fair way to allocate respository space, we may wish to propose another during the comment period.

Article VI - Criteria for Disposal

Paragraph A.1 Second Line. Delete the words "only such" and insert the word "all."

Paragraph A.2. When is Appendix F information due?

Paragraph B.1 First Sentence. We would suggest in DOE's own interest that it not commit to being present for all cask loadings. It would be more appropriate for DOE to have the right to have a representative present.

Paragraph B.1 Second Sentence. Delete the balance of the paragraph after the word "accept" and insert "for transportation and disposal all SNF and/or HLW properly identified, packaged and labeled pursuant to all applicable regulations." This contract should not attempt to rephrase existing regulation, i.e., specific DOE requirements should only be delineated here if not covered by regulation. See 49CFR172.204 and .200.

Paragraph B.3.(a) First Line. Delete "(2)" and insert "(b)." Also, same general comment as Article V.B.6 above.

Article VII - Title

Second Line. Delete "Article VI" and insert "Article V."

In addition, at the end of this acticle should be added this sentence. "Should DOE elect to reprocess SNF provided by Purchaser pursuant to this contract, a credit to the Waste Fund shall be made in an amount equal to the value of the recovered products."

Article VIII - Fee and Terms of Payment

Paragraph A.1. Insert after the word "mil" the term "($0.001)."

Paragraph A.2. See general comment. We understand the burnup ranges are yet to be defined. Also, when a "dollar per kilogram" charge is referred to, it must be defined as to whether this is kilograms uranium initially loaded (and even if that is actual or nominal design value), or kilograms of discharged heavy metal (uranium plus plutonium). We realize that it is really only important that DOE's basis for calculation of the charge and our application of the charge to actual spent fuel is consistent, but it must be defined. We would suggest initial, nominal design values of uranium loading. This would be much simpler to administer.

Paragraph A.3. Section 302(a)(4) of the Act states that the Secretary is to "annually review the amount of the fees." Later in that same paragraph the Act states the Secretary "shall propose an adjustment to the fee" in light of his review. We suggest that the intent of Congress was to review the total costs of the program as against all revenues (hence the word "fees"), but that, in light of the review of total expenditures versus total revenues, only the mil per kilowatt hour fee was to be adjusted on a prospective basis.

As a further comment on this section, it is difficult for a utility to respond to changes in the mil per kilowatt hour charge, in terms of collections from its ratepayers, in less than a year. We recognize the 90 day effectiveness period is consistent with the requirements of the Act; nevertheless, it may be desirable to address this subject in later technical amendments to the Act.

Paragraph A.4. We do not fully understand this paragraph. We believe this language calls for 1 mil per kilowatt hour to be paid for prior generation of all fuel which is in-reactor as of April 7, 1983; if this is the case, it is not clear this was the intent of Section 302(a)(3) of the Act.

Should not the word "unburned" in line 6 read "burned?"

Paragraph B.1. Four assigned three month periods should be specified. Also, what time periods of generation are the one-time adjustment period and the July 7, 1983 payment intended to cover?

Paragraph B.2.(a). It would appear that interest for 10 years at the ten year Treasury note rate would be applied to the total fee for prior fuel. This appears inequitable; rather, the financing arrangement should provide that interest be applied on the unpaid balance only. Further, the Purchaser should be allowed at any time to pay the entire unpaid balance or any portion thereof at no penalty. Also, we are unaware as to where the ten year Treasury note rate is published (see also reference in Appendix G).

Paragraph B.3.(a) First Line. Delete the word "by" and insert "either by check or." Insert after the word "transfer," the phrase "provided payment is received by the due date,."

Paragraph B.3.(b) Third Line. Insert after the word "advice" the phrase "together with check, provided check is used as the method of payment,".

Paragraph C.1. We are not aware of a publication wherein we may find the Quarterly Treasury Rate. We would suggest this paragraph reference the 26 Week Treasury Bill Rate (as reported in the Wall Street Journal on the due date specified in Article VIII B.1.).

Paragraph E. It would be helpful to separate the type of records related to administration of this agreement. One category is records relating to identification and physical characteristics of SNF and HLW delivered to DOE under the contract. It is reasonable to retain such records related to given waste shipments for a period of three years after the shipment in question. The other type of record relates to the fee payments; i.e., energy generation and financial information. These records should be retained for a period of three years after the payment period in question.

Article IX - Delays

Paragraph A - General Comment. The language proposed by DOE seems appropriate as applied to day-to-day operational problems. For instance, a crane component fails at a DOE facility, and, because of the unavailability of a spare part a shipment must be postponed for a month. However, we would distinguish this from a case where DOE fails to meet the repository operation schedule mandated by the Act. We desire to reserve additional comment on this point during the comment period.

Paragraph A Line 3. Insert the word "reasonable" before the word "control."

Paragraph A Line 7 and 8. Insert the word "promptly" before the word "notify" and delete the phrase "as soon as possible."

Paragraph B Line 5. Delete "estimated" and insert "reasonably" after the word "costs."

Article X - Suspension

Paragraph 1 Line 6. Insert the word "reasonable" before the word "control."

Article XIV - Representation Concerning Nuclear Hazards Indermnity

Line 9. The term "contract location" needs to be defined.

Article XV - Assignment

Delete the phrase "a party to this contract" and insert the phrase "the Purchaser."

Signature Page

In phrase beginning "WITNESSES," delete the word "CONTRACTOR" and insert the word "PURCHASER."

Appendix A

Capacity should be specified by megawatt thermal and/or megawatt electrical net.

"Date of Commencement of Operation" should be changed to read "Date of Commerical Operation."

Appendix B

Line 7. Delete the words "and approved" and insert the words "for approval."

Shipping Lot No. - We assume DOE would establish a convention of some type for designation of lot numbers such that there is some consistency (and absence of duplication) among Purchasers.

Page 2. What would DOE consider "suitable proof of ownership of the SNF and/or HLW?"

Page 2. Signature Section. The phrase "Approval for DOE" should read "Approved by DOE."

Appendix C

For ease of administration, we would suggest that the required "Metric Tons Uranium" be specified as the initial, unirradiated nominal mass.

Signature Section. The phrase "Approved for DOE" should read "Approved by DOE."

Appendix D

Why are shipping lot numbers and commitment year for delivery required pursuant to Appendix D? This information should be applicable to Appendix B.

Suggest the term "Metric Tons Uranium" be specified as initial, unirradiated nominal values.

Appendix E

Paragraph B.2.(b). and following Note. Does this mean if fuel has nonfuel component is it NS-2? Or if it requires special handling it is NS-2?

Paragraph B.3. The phrase "these specifications" should read "this specification."

Paragraph B.5.a. Third Line. The word "classing" should read "cladding."

Paragraph B.5.b. The economic and operational impact of leak testing as required by this paragraph will be quite serious, will undoubtedly impede the progress of spent fuel shipping, and, most importantly, be of little or no practical value. Using current state of the art, fuel sipping after five years of decay time gives virtually meaningless results.

In the case of fuel which has been sipped or otherwise tested soon after discharge from the reactor for operational reasons, and found to be leaking, we would of course be willing to make that information known to DOE.

The reference to percentages of regulatory limits regarding coolant activities must be omitted or clarified. The regulatory limit specified in 10CFR71.35(a)4 is overridden by some cask certificates of compliance. It would be more reasonable to require that only for fuel sipped and found leaking as Failed Fuel - Class F2, DOE has the right to require Purchaser to sample cask gas or water. These samples would have to meet the requirements of 10CFR71.35(a)(4) or 71.36 (a)(2).

Paragraph B General Comment. It would probably be appropriate to establish a fuel classification for consolidated fuel, with its own unique set of allowable physical dimensions and handling characteristics.

Appendix F

Paragraph A.1. Omit 1.2 through 1.5 if possible. These drawings are difficult to obtain.

Paragraph A.2. Add subsection (d) for nonfuel components. Designate fuel assembly in which inserted, weight, length, cladding materials and absorber material.

Paragraph A.3. Reference to "Delivery Commitment." This should read "Shipping Lot."

Paragraph D. Omit all information except items 5 and 6. No information should be required on a cycle of cycle basis. If there is good reason for DOE to require such detailed information, we would be pleased to discuss; otherwise, the requirements are overly burdensome.

Appendix H - General Terms and Conditions

Limited rights Legend - paragraph (a). Insert the word "be" before the word "retained."