Department of Energy
Washington, DC 20585

HQO.880120.0055

JAN 18 1988

Mr. B.J. Youngblood, Chief
Operations Branch
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Youngblood:

Your letter of December 9, 1987, requests the DOE to place the Nuclear Regulatory Commission (NRC) on controlled distribution for copies of any principal contractors' Quality Assurance (QA) Plans for Site Characterization of High-Level Nuclear Waste Repositories for NRC staff review and comment. We are pleased to comply with this request.

The DOE recognizes the benefit of obtaining NRC review and comments on the more detailed implementing QA Plans of the principal contractors. However, in view of the high priority and extensive effort being given to the consultation draft of the Site Characterization Plan (SCP/CD), the DOE requests that NRC QA review and comment focus first on Section 8.6 of the SCP/CD, in which the DOE has described the QA program applied to data collection activities during site characterization, as the immediate and primary basis for identification and resolution of QA issues. The DOE believes that this approach is consistent with the requirements of 10 CFR Part 60, Section 60.11, and with the Guidance in Section 4.0 of the NRC QA Review Plan for Site Characterization. We hope to resolve your comments on the SCP/CD prior to interactions on the more detailed contractor QA Plans.

By copy of this letter, this office requests the NNWSI Project Office place the NRC on controlled distribution for the remaining principal contractor's QA plans referenced in your letter.

Sincerely,

Ralph Stein

Ralph Stein, Acting Director
Siting, Licensing, and Quality
Assurance Division
Office of Geologic Repositories

cc: Carl Gertz, NNWSI

ELECTRIC UTILITY COMPANIES'
NUCLEAR TRANSPORTATION GROUP

HQO.880120.0059

LEGAL COUNSEL:

LEBOEUF, LAMB, LEIBY & MACRAE
1333 NEW HAMPSHIRE AVENUE, N.W.
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(202) 457-7531

January 14, 1988

Mr. Lake H. Barrett
Director
Transportation and Waste
Systems Division
Office of Civilian Radioactive
Waste Management
U.S. Department of Energy
1000 Independence Avenue, S.W.
Room 7F043
Washington, D.C. 20585

Dear Lake:

At its meeting last week the American Committee on Radwaste Disposal gave its support to broad utility participation in the Facility Interface Capability Assessment. Enclosed for your information is a copy of the memorandum we presented to ACORD.

As you can see from the enclosure the Group regards the FICA as an important program. We look forward to continuing to cooperate with OCRWM, ORNL and NAC in the conduct of the FICA. In particular, we plan to work closely with NAC in arranging for appropriate contacts at each utility and in maintaining liaison with all the companies taking part in the FICA.

You will note the discussion on pages 5-6 of the enclosure concerning OCRWM's off-site transportation network study. We make a number of recommendations about the integration of the FICA and the off-site study and we would welcome an opportunity to discuss this matter with you after you have had an opportunity to consider our recommendations.

Best regards.

Sincerely,

D.A. Brodnick per cmt

D.A. Brodnick
Chairman

Enclosure

cc w/encl: Mr. Edwin L. Wilmot

January 5, 1988

CONCLUSIONS AND RECOMMENDATION OF ELECTRIC UTILITY COMPANIES' NUCLEAR TRANSPORTATION GROUP CONCERNING COMPLETION OF SITE VISITS PURSUANT TO FACILITY INTERFACE CAPABILITY ASSESSMENT

Introduction

This memorandum summarizes the conclusions and recommendation of the Electric Utility Companies' Nuclear Transportation Group (NTG) concerning the completion of site visits contemplated by the third phase of OCRWM's Facility Interface Capability Assessment (FICA).

Description of the FICA

The objective of the FICA is to define the technical interface between utilities and the Federal waste management system, which is of vital importance both to utilities and OCRWM. The scope of this assessment is to determine the capabilities of existing power reactors to manage (e.g., store and ship) spent fuel and to determine if and how upgrading of facilities could substantially improve reactor spent fuel shipping and handling capabilities. The FICA is expected to produce data that will be of considerable value to all nuclear utilities and OCRWM, as discussed in more detail on page 3 of this memorandum. The FICA has already had a beneficial effect in that it has helped to reduce the amount of information requested by DOE on the RW-859 form, thereby mitigating to some extent the burden on utilities of completing this form.

The FICA is divided into three Phases, two of which have been completed. The first phase consisted of identifying necessary interface data items and creating a data base with respect to spent fuel and high-level waste handling facilities, based on existing sources. The second phase consisted of a series of test visits to five sites,* designed to develop and demonstrate procedures to be used for, and to provide utilities an opportunity to evaluate, the FICA. The third phase would extend the visits to all other commercial nuclear power plants.

Experience Gained From FICA Test Visits

The NTG's FICA Working Group met on December 2, 1987 and concluded that the staff of Nuclear Assurance Corporation (NAC), OCRWM's subcontractor for the FICA, conducted the test visits in a professional manner which resulted in developing important information concerning the physical capabilities and operating constraints of the selected plants, for example, the data shown on the enclosed Table 1.3 from NAC's draft study ("Changes in Cask-Handling Assessments after Test Visits").

The test visits permitted NAC and the designated utilities to gain experience with the procedures used by NAC and to help assess the costs and benefits of extending the FICA to all 77 power reactor sites. There were a number of suggestions that

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* Millstone, Surry, Peach Bottom, St. Lucie and Crystal River. Enclosed is a representative letter from the Chairman of the American Committee on Radwaste Disposal (ACORD) to the Chief Executive Officers of the utilities designated for the test visits, i.e., Northeast Utilities, Virginia Power, Philadelphia Electric, Florida Power & Light and Florida Power Corporation.

have been made by the FICA Working Group concerning the initial visits that should improve the conduct of the visits to other sites.

Benefits of Completing the Third Phase of the FICA

If the FICA were extended to all the remaining 72 utility sites it can reasonably be expected to provide significant benefits to the Federal waste management system. Moreover, participation in the FICA should be of value to nuclear utilities in that it should help them to be aware of the potential impact that design changes and plant modifications could have on their future capability to ship spent fuel. A further explanation of the basis for these conclusions is set forth below.

Based on evaluation of existing information it appears that less than 20% of the required interface information is currently known by OCRWM. The FICA will provide essential technical input to decisions with respect to design and operation of spent fuel casks (e.g., the number, size and type of casks needed) and the entire transportation system as well as with respect to the MRS and repository. The FICA should also provide technical input for critical system optimization modelling analyses (e.g., the relative number of truck, rail and barge shipments). The information to be developed in the FICA is also needed in connection with other interactions between utilities and the Federal waste management system, e.g. analysis of incentives or DOE/utility cost sharing for nuclear waste activities performed

by utilities. Examples of such activities are site access, equipment and system upgrades.

Based on the experience of the NTG's FICA Working Group, a significant effort will be required by operating, engineering and nuclear fuels personnel from each utility, on the order of two person-months per site, to collect the information required for the assessment of a site and to participate in the multi-day associated meetings with NAC, including a plant tour. In addition, it may be necessary for a utility to secure the assistance of consultants, e.g., an architect-engineering firm, in order to amass the required data. The total cost to the Nuclear Waste Fund of the third phase of the FICA is estimated to be approximately $1.5 million. This and the associated cost to utilities of participating in the FICA is relatively small in terms of benefits to utilities from the FICA.

Timing of Completing and Updating the FICA

Given the importance of the FICA to implementation of the Federal waste management system, NAC should visit all the remaining utility sites as promptly as this can be efficiently accomplished. This will make the data from the FICA available to OCRWM and utilities in a timely and economic fashion. It is desirable to have the data available to OCRWM as early as practicable so as to enable their use in design decisions, modelling, etc., as discussed above. Moreover, early completion of the FICA will make the resulting data available to utilities to facilitate near-term decisions concerning on-site storage of

spent fuel. A period of about two years seems reasonable to accomplish the remaining visits on a schedule compatible with utilities' needs, e.g. plant outages, and to complete the required reports.

The FICA study should be updated periodically, perhaps approximately every five years. It would be appropriate that the FICA evaluation of a particular site be updated at least once prior to completion of a final delivery schedule for that site pursuant to Article V.C. of the Standard Contract for Disposal of Spent Fuel and/or High-Level Nuclear Waste.

Evaluation of Off-Site Transportation Network

The FICA is designed to collect information "within the plant gate." OCRWM also plans to collect information on the status of road, rail and barge facilities extending from nuclear power plant sites to the nearest major transportation networks. Initial visits have been made to the Zion, Shearon Harris and Yankee Rowe sites and OCRWM eventually plans to evaluate all the sites.

This off-site study is intimately related to the FICA and the schedule for its completion should be integrated with that of the FICA. The off-site study should be assigned to a subcontractor having demonstrated experience in heavy haul and nuclear-related transportation activities and evaluations. Utilities should not be held responsible for collecting the necessary data but they should be kept apprised of the subcontractor's plans to conduct these studies near the sites of

the utilities' plants. This will help assure that timely, appropriate contacts are made with state officials and will facilitate cooperation between utilities and the subcontractor in the conduct of these studies. Utilities should be afforded an opportunity to review draft reports concerning their sites.

Recommendation

The NTG recommends that the Utility Nuclear Waste Management Group (UNWMG) concur in these conclusions and coordinate with the NTG in helping to encourage cooperation by all nuclear utilities in the FICA. An appropriate, flexible mechanism should be developed by NTG, in cooperation with the UNWMG and NAC, to contact each utility at the appropriate level or levels and to convey the conclusions expressed in this memorandum and the experience gained from the FICA test visits. Because successful completion of site visits requires close cooperation and extensive interaction between utility and NAC personnel, each utility participating in the project will need to designate an appropriate senior person or persons who will be assigned to this task throughout the assessment of each site.

ACORD should be briefed on this matter at its January 7, 1988 meeting and thereafter OCRWM should be advised of the views expressed herein.

Enclosures

Wisconsin Electric POWER COMPANY
231 W. MICHIGAN, P.O. BOX 2046, MILWAUKEE, WI 53201

February 19, 1987

Mr. William B. Ellis
President, Chairman &
Chief Executive Officer
Northeast Utilities
107 Selden Street
Berlin, Connecticut 06037

Re: U.S. Department of Energy Facility Interface Capability Assessment Program

Dear Mr. Ellis:

I wish to request your company's cooperation with the U.S. Department of Energy (DOE) in carrying out a specific program in furtherance of DOE's responsibilities under the Nuclear Waste Policy Act of 1982.

The Act requires that DOE accept spent nuclear fuel from civilian nuclear power plants for permanent disposal in a geologic repository. The DOE established the Facility Interface Capability Assessment Program (the Assessment Program) to determine nuclear utility capabilities to store, consolidate and ship spent nuclear fuel. These determinations will have a major impact on the design and construction of the entire disposal system, including the spent fuel casks to be used for transportation to the federal repository or to monitored retrievable storage. It is therefore of vital importance to utilities that their needs be taken into account by DOE, particularly in the early phases of system design.

This effort is being coordinated for the utility industry by the Electric Utility Companies' Nuclear Transportation Group and the Utility Nuclear Waste Management Group. The DOE contractor for the Assessment Program is Nuclear Assurance Corporation (NAC), acting

together with Oak Ridge National Laboratory. NAC has completed that portion of the Program designed to correlate all existing information on nuclear utility capabilities into a single data base. During the next phase of the Program, NAC plans to visit the following power plant sites to validate the information already gathered on these plants and to ensure that it properly represents the plants' physical capabilities:

Millstone 1, 2 and 3
Surry 1 and 2
Peach Bottom 2 and 3
St. Lucie 1 and 2
Crystal River 3

These reactors were selected based on criteria designed to maximize the benefit of the preliminary visits, e.g. they represent all major vendors and represent a variety of spent fuel shipping experiences.

It is critical for all utilities to ensure that the physical capabilities and operational constraints at their plants are properly evaluated. We urge you to designate a technically qualified contact within your company to coordinate your participation in the Assessment Program. This individual should be prepared to work with NAC to ensure an accurate assessment is made of your facilities and capabilities.

Your designation of an appropriate contact to participate in the Assessment Program will ensure the degree of cooperation necessary for the success of the Program. We hope you will support this important effort.

I would also appreciate it if you would provide the name of your designated contact person to the following representative of the utility task force in order to assist with the overall industry coordination effort:

Leonard M. Trosten, Esq.
Program Manager and Counsel
Electric Utility Companies' Nuclear
Transportation Group
1333 New Hampshire Avenue, N.W.
Suite 1100
Washington, D.C. 20036

Sincerely,

Chairman
American Committee on
Radwaste Disposal

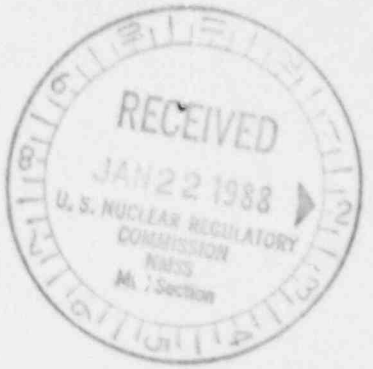
Facility Interface Capability Assessment
Draft Interim Site Visits Report

Table 1.3

Changes in Cask-Handling Assessments after Test Visits

Test Visit Reactor	Utility	Pre-Visit Assessment	Test-Visit Assessment (Status as of November 1987)		
		Present	Present	Reanalysis	Facility Modification
St. Lucie 1	FP&L	25 Ton	25 Ton	40 Ton	100 Ton
St. Lucie 2	FP&L	25 Ton	100 Ton	125 Ton	125 Ton
Crystal River 3	FPC	40 Ton	*	*	40 Ton
Peach Bottom 2	PECo	40 Ton	100 Ton	100 Ton	100 Ton
Peach Bottom 3	PECo	40 Ton	100 Ton	100 Ton	100 Ton
Surry 1	VPCo	125 Ton	125 Ton	125 Ton	125 Ton
Surry 2	VPCo	125 Ton	125 Ton	125 Ton	125 Ton
Millstone 1	NU	40 Ton	40 Ton	40 Ton	40 Ton
Millstone 2	NU	100 Ton	100 Ton	100 Ton	100 Ton
Millstone 3	NU	100 Ton	100 Ton	100 Ton	125 Ton

* Cask-drop analysis for Crystal River 3 indicates requirement for strengthening of the auxiliary building operating floor prior to further cask operations.



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