



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 10, 2004

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-04-0135

TITLE: DEMONSTRATION TEST PLAN FOR FULL-SCALE SPENT
NUCLEAR FUEL RAIL TRANSPORTATION CASK TESTING
UNDER THE PACKAGE PERFORMANCE STUDY

The Commission (with Commissioners McGaffigan and Merrifield agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of December 10, 2004. Chairman Diaz disapproved the staff's recommendation.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in black ink, appearing to read "Annette L. Vietti-Cook", with a horizontal line underneath.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Diaz
Commissioner McGaffigan
Commissioner Merrifield
OGC
EDO
PDR

VOTING SUMMARY - SECY-04-0135

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. DIAZ		X			X	10/13/04
COMR. McGAFFIGAN	X				X	12/1/04
COMR. MERRIFIELD	X				X	11/18/04

COMMENT RESOLUTION

In their vote sheets, Commissioners McGaffigan and Merrifield approved the staff's recommendation and provided some additional comments. Chairman Diaz disapproved the staff's recommendation. Subsequently, the comments of a majority of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on December 10, 2004.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: CHAIRMAN DIAZ
SUBJECT: SECY-04-0135 - DEMONSTRATION TEST PLAN FOR
FULL-SCALE SPENT NUCLEAR FUEL RAIL
TRANSPORTATION CASK TESTING UNDER THE
PACKAGE PERFORMANCE STUDY (WITS 200400069)

Approved _____ Disapproved Abstain _____
Not Participating _____

COMMENTS:

See attached comments.



SIGNATURE

Oct 13, 04

DATE

Entered on "STARS" Yes ___ No ___

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200400069

CHAIRMAN DIAZ's COMMENTS ON SECY-04-0135, DEMONSTRATION TEST PLAN FOR FULL-SCALE SPENT NUCLEAR FUEL RAIL TRANSPORTATION CASK TESTING UNDER THE PACKAGE PERFORMANCE STUDY

I appreciate the staff's efforts to develop a test plan that can satisfy the objectives of the Package Performance Study (PPS), and the plan presented in SECY-04-0135 represents progress in the right direction. However, in view of several emergent factors that affect the PPS, I disapprove the proposed PPS test plan.

Recent technical developments germane to the PPS include the full-scale testing of several casks both domestically and abroad, the interactions between the ACNW and the staff on the PPS test plan, and the results of fire tests performed as part of the World Trade Center investigation being conducted by the National Institute of Standards and Technology (NIST). Also, the NRC has deferred the acquisition of a cask and railcar to support the PPS because we have begun FY 2005 under a continuing resolution. Considering these factors together, I believe it is now appropriate to reassess the need for the NRC to perform a separate study to meet the confirmatory research objectives of the PPS. At the time the NRC made the commitment to undertake this study, the aforementioned information was not available.

RES should collaborate with NMSS's Division of High Level Waste Management and Spent Fuel Project Office to review the results of the six full-scale cask tests that were performed at Sandia National Laboratory and in Germany, in August and September, respectively, of this year. A detailed review and analysis of the results of these tests and the NIST fire tests would enable the staff to determine the extent to which they support the objectives of the PPS. This analysis should be completed in six months, after which the staff should provide the Commission with a recommendation on how to proceed with the PPS project. The staff's recommendation should be supported by a listing of the PPS objectives that have and have not been met by the recent testing, an assessment of the costs and benefits of proceeding or not proceeding, and, if applicable, a revised scope for the study. In developing its recommendation, the staff should also consider if conducting a revised-scope PPS would be - at that time and after weighing all the new information - an appropriate commitment of staff and funds to ensure adequate protection of public health and safety for the transportation of spent fuel. I believe that the Commission is obligated to judiciously apply its resources in carrying out its mission, and a comprehensive analysis as described above would significantly support this obligation.

NOTATION VOTE

RESPONSE SHEET

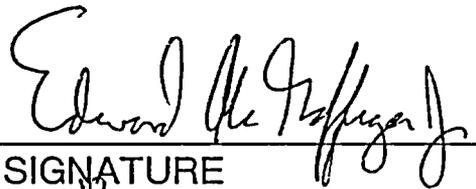
TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MCGAFFIGAN
SUBJECT: SECY-04-0135 - DEMONSTRATION TEST PLAN FOR
FULL-SCALE SPENT NUCLEAR FUEL RAIL
TRANSPORTATION CASK TESTING UNDER THE
PACKAGE PERFORMANCE STUDY (WITS 200400069)

Approved Disapproved _____ Abstain _____

Not Participating _____

COMMENTS:

See attached comments.



SIGNATURE

Dec. 1, 2004

DATE

Entered on "STARS" Yes No _____

Commissioner McGaffigan's Comments on SECY-04-0135

I have long been a supporter of a robust Package Performance Study. I supported the study from its inception in 1999. I supported the study when the plans called for performing a drop test and a fire test to confirm the analytical codes, and to demonstrate the inherent safety in cask design. I supported adding a second truck cask to the study. I supported the study when a demonstration test was added as a result of public comment. I supported the study when NUREG/CR-6768 was published, when NUREG/CR-6672 was published and when NUREG-1768 was published. I supported the study in my votes on COMSECY-02-0036, COMSECY-04-0021 and SECY-04-0029, and I support it again today.

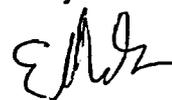
I believe testing of both a full scale truck and full scale rail cask is critically important for public confidence in our HLW program. We have been telling the public that we are going to perform these tests for over 5 years. We need to get on with it. We need to move forward and finalize plans for conducting these tests. Unfortunately, budgetary constraints and the continuing resolution this year has necessitated a delay in the program. However, even if the time frame for performing the tests is uncertain, the Commission can still make a clear commitment to performing the tests, and allow staff to communicate to the public what those tests will involve. There has already been negative press stating that the NRC has decided not to perform any testing of transportation casks. It is imperative that we correct this misperception. We also need to clearly communicate that there is still plenty of time to perform these tests. I do not believe DOE will be shipping any fuel to Yucca Mountain before the 2012-2016 time frame, if NRC grants the construction authorization and license amendment. Even that is an ambitious schedule. As I stated in my vote on SECY-04-0029,

"DOE first focused on a 2010 opening of the repository in 1989. The 2010 date was then predicated on a year 2000 submittal of a construction authorization, followed by a four year hearing, a four year construction period for surface facilities and a two year second hearing on the license amendment to receive and possess high-level waste and spent fuel. Today DOE hopes to submit a construction authorization request on December 30, 2004, hopes for a three year hearing, hopes for a brief construction period, and hopes for essentially no second hearing because all contentions will have been litigated in the first hearing. All of those hopes are unlikely to be realized."

Since I wrote that, DOE's FY 2005 budget has been reduced by \$303 million compared to the request. In addition, the Federal Appeals Court has rejected one element of EPA's (and NRC's) Yucca Mountain standard which will now require parallel rulemakings to be conducted. Finally, DOE has announced it will not meet the December 30, 2004 target for submitting an application.

I do understand that these tests are expensive and with continuing budgetary pressures, we have to decide how to do the most with the limited funds available. I think Commissioner Merrifield's proposal to utilize data from other full scale tests performed in other countries in conjunction with a demonstration performed here does just that. This proposal will allow the staff to gather the data needed to validate the computer models and perform the demonstration tests that are needed for public confidence. I also agree that the staff should continue to work with DOE to seek funding for a full scale truck cask test.

Commissioner Merrifield's proposal keeps this study moving forward and allows for the possible addition of other tests (like for a truck cask) in the future. With the current budget issues, I believe this gives future Commissions the best option for shaping this study as it continues to evolve.



NOTATION VOTE

RESPONSE SHEET

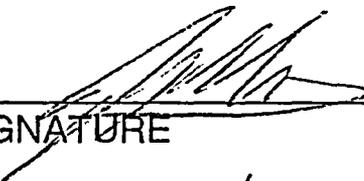
TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MERRIFIELD
SUBJECT: SECY-04-0135 - DEMONSTRATION TEST PLAN FOR
FULL-SCALE SPENT NUCLEAR FUEL RAIL
TRANSPORTATION CASK TESTING UNDER THE
PACKAGE PERFORMANCE STUDY (WITS 200400069)

Approved Disapproved Abstain

Not Participating

COMMENTS:

See attached comments.



SIGNATURE

11/18/04

DATE

Entered on "STARS" Yes No

Comments from Commissioner Merrifield on SECY-04-0135:

I approve proceeding with the Package Performance Study as modified in the following paragraphs. There have been significant developments since the staff submitted SECY-04-0135 for Commission consideration. The most notable has been the revelation of international regulatory testing of transportation casks, particularly by Germany. These German sponsored tests should provide appropriate data for validating our existing regulatory approach and the NRC does not need to repeat these experiments.

As a separate matter, NRC should conduct an integral demonstration test as one means of increasing public confidence on the viability of existing spent fuel transportation casks. By *integral demonstration test*, I mean a test that involves the system as a whole and not a test of individual components. Although it would be helpful to have financial support from DOE for this test, NRC should fund at least one test of a rail spent fuel transportation cask regardless of what financial support is received from DOE.

The demonstration test should be conducted at reasonable cost when funds are available and should involve a single rail spent fuel transportation cask. The test should be constructed to represent a viable transportation accident, not necessarily the worst case scenario or a hypothetical accident requiring multiple events to occur simultaneously. Specifically, the test should consist of a simulated rail crossing with a train traveling at an appropriate speed colliding at a ninety degree angle with a transportation cask on its rail carrier car in a normal transportation configuration. There is a reasonable probability such an accident could occur. The necessary instrumentation and video cameras should be used to document the impact and resulting cask condition. The purpose of this test is to demonstrate the robustness of the cask design and overall transportation system. The test will consist only of the collision and the natural results of that collision. No separate fire testing or emersion testing will be conducted on the demonstration cask. For effective utilization of resources, the testing should be done at an existing facility, such as the train testing facility in Pueblo, Colorado.

The timing of the demonstration test will be established when our appropriations are determined by Congress. Staff should prepare an information paper outlining the details and projected costs of the proposed demonstration test as described above. It is my expectation that costs for this test should be modest in comparison with the much higher costs previously proposed by the Office of Research. Given the current budget limitations, this paper should be submitted within 90 days after our appropriations are finally determined by Congress and before initiating any action to implement the test.

An equivalent demonstration test on a truck spent fuel transportation cask may be considered at an appropriate time in the future pending the results of the rail transportation test, DOE's selection of a specific truck transportation cask design, and DOE's willingness to financially support such a test.



4/12/04