Name of contractor: Sandia National Laboratory
(J5546 - Spent Fuel Transportation Risk Assessment; Principal Investigator: Douglas Ammerman)

1. Purpose of Contract:

a) How does it further agency's regulatory mission?

Spent fuel transportation falls within NRC's regulatory responsibilities. This contract furthers the agency's mission in this area by updating the technical basis for spent fuel transport risk assessment, and assuring the public that NRC's Part 71 regulations provide adequate protection of health and safety for this activity. Also, the intent of this contract is to publish the results as a NUREG, not a NUREG/CR, so the public and other agencies can see that NRC continues to believe the regulations of 10CFR71 are adequate. This process also provides the opportunity to obtain public review and comment on the risk assessment basis, to achieve greater public understanding and acceptance of spent fuel transport. In this regard, the Understanding Cask Basics CD/Electronic Brochure, (already produced under this contract) should contribute to better understanding of basic terms and the level of protection afforded by current NRC transportation safety regulations.

b) What happens if we don't proceed?

The agency will not address shortcomings in previous spent fuel risk assessments, and will not have new information to present in outreach efforts in this area, which has been of longstanding concern to the public. Furthermore, the safety role that welded inner canisters play in spent fuel transportation accidents will not be evaluated. This evaluation may provide valuable insights as the agency embarks on an overall review of the regulatory basis for spent fuel transport and storage, particularly the role canisters may play in assuring safety in eventual transport if storage periods are extended. The CD/Electronic Brochure will not be updated based on SFTRA analysis results and public comments.

c) Does anything require us to continue? (SRM/law, etc)

This contract is not required by any SRM/law. However, the Commission stated in the Federal Register [46 FR 21620] in 1981 that, based on the "Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes" (NUREG-0170), although the present regulations were adequate to protect the public against unreasonable risk from the transportation of radioactive materials, prudence dictated that regulatory policy concerning this subject would be subject to close and continuing review. With respect to spent fuel transportation, the agency has since conducted two reviews: the "Shipping Container Response to Severe Highway and Railway Accident Conditions" (NUREG/CR-4829), commonly known as the Modal Study, in 1987 and "Reexamination of Spent Fuel Shipment Risk Estimates" (NUREG/CR-6672) in 2000. The spacing of these reports indicates the agency has felt in the past that reviews should occur approximately every decade. Failure to complete the work under this contract will jeopardize this review cycle. The work under this contract continues to fulfill the Commission commitment for close and continuing review of transport safety policy.

f. Carry Over? $155,550.90
g. Current Year funding? $25,000
h. What's the spending Plan? Expect $23,000 carryover to FY11
i. Committed/Obligated? $1,675,239
j. Future Year funding? FY11 $75,000
k. When will it end? FY11
l. Do we need to plan for renewal/replacement? No

4. Other pertinent considerations of the PM and branch?

- In part in response to recent discussions between SFST and Sandia managers on SFTRA during which the need for a high quality report was stressed, Sandia managers are planning to add a more thorough internal quality review of the SFTRA draft report. This additional review will not be charged to the project, but the current deliverables identified in item 2 above would be extended 2-3 weeks if SFST approves a schedule extension for Sandia to expand their internal quality review.
- Based on oral presentations by Sandia to date, SFST technical reviewers (TRD staff) are satisfied with contractor progress within their respective areas.
- If TRD prefers direct oversight by their staff, contract can be transferred.