

EGG-M--88384

DE89 009732

EGG-m-88384
CONF-890207--20
Received by ORTI
APR 13 1989

Waste Management '89
February 26-March 2, 1989
Tucson, Arizona

WORKING WITH THE STATES TO TRANSPORT TMI-2 CORE DEBRIS^a

T. A. Smith; A. A. Anselmo
Idaho National Engineering Laboratory
EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

ABSTRACT

Close communications with state officials has been a key factor in success of the Three Mile Island Unit 2 core debris shipments. The U.S. Department of Energy made extensive efforts to provide state officials with schedule information, answer technical questions, and satisfy concerns. Communications started before the campaign and continued during shipments and at intervals between shipments. Those efforts led to good working relationships with the states, kept governors and other state officials informed so they could respond to public concerns, provided the opportunity to recognize and respond to specific state concerns, facilitated state inspections, and provided avenues to avoid conflict and potential litigation. Good communications and working relationships with state officials also greatly benefited the community relations effort for the campaign.

INTRODUCTION

In 1986, when rail shipments of Three Mile Island Unit 2 (TMI-2) core debris first rolled across the United States, the U.S. Department of Energy (DOE) and its contractor, EG&G Idaho, Inc., worked closely with state officials along the route. Extensive efforts were made to answer questions, satisfy concerns and help state officials meet internal requirements (1). Working closely with state officials before and during the transportation campaign has been a key factor in success of the program. Close communications and coordination with state officials kept governors and other state officials informed so they could respond to public concerns, provided the opportunity to recognize and respond to

a. Work supported by the U.S. Department of Energy, Assistant Secretary for Nuclear Energy, Office of LWR Safety and Technology, under DOE Contract No. DE-AC07-76-ID01570.

MASTER

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED. *dx*

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency Thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

specific state concerns, facilitated state inspections, and provided avenues to avoid conflict and potential litigation. In addition, good relationships with state officials had tremendous community relations value (2).

CAMPAIGN BACKGROUND

In a Memorandum of Understanding (MOU) between DOE and the Nuclear Regulatory Commission (NRC), DOE agreed to acquire the TMI-2 core for research and storage (3). Defueling began in 1985. In 1986, DOE completed procurement of two NuPac 125-B Rail Casks, designed specially for transport of the TMI-2 core debris (4). The NuPac 125-B Rail Cask is a double-containment cask system with separate and independent inner and outer "leaktight" vessels. Each cask is mounted on a dedicated 160-ton capacity rail car. A third NuPac 125-B Rail Cask was leased by GPU Nuclear from Nuclear Packaging, Inc. in 1987.

In 1986, arrangements were finalized with Consolidated Rail Corporation (Conrail) and Union Pacific Railroad to transport the rail casks by exclusive-use trains. Shipments originated at TMI near Harrisburg in south-central Pennsylvania, crossed more than 2,400 miles of track through the Commonwealth of Pennsylvania and the states of Ohio, Indiana, Illinois, Missouri, Kansas, Nebraska, Colorado, Wyoming, and Idaho, and terminated at the Idaho National Engineering Laboratory (INEL) of DOE near Idaho Falls, in southeast Idaho. Major cities along the route included Pittsburgh, Indianapolis, St. Louis, and Kansas City. Shipments started in July, 1986, and are expected to end in 1989. By the end of 1988, approximately 70 percent of the core had been transported.

COMMUNICATIONS BEFORE CAMPAIGN INITIATION

Communications with the states started several months before the start of the transportation campaign (5). In February and March of 1986, the governor's designee in each of the ten states was contacted and provided with technical information about the shipments, the route and overall schedule. Later, three states--Pennsylvania, Illinois and Missouri--requested meetings to discuss the shipments. Those meetings were conducted at TMI to allow state officials to examine the rail casks and other hardware.

The meetings set the tone for good future communications and working relationships. State officials were provided the opportunity to inform DOE of various state inspection, notification, and escort requirements. Because the meetings were held several weeks before the start of the campaign, ample time existed to make arrangements to accommodate most state requests. For example, DOE made arrangements with the railroads to allow state inspections at crew change points along the route so that

additional stops for inspections were unnecessary. The meetings also provided the opportunity for DOE and EG&G Idaho to answer technical questions of state officials, so that they might be better informed and able to pass information to governors, other state officials and the public. In turn, DOE and EG&G Idaho learned much about political sensitivities and potential opposition from special interest groups in the states. This information allowed DOE and EG&G Idaho to better anticipate potential conflicts and to develop community relations methods to address them.

None of the other seven states requested meetings; however, telephone communications were maintained to ascertain various requests and internal requirements. While telephone conversations allowed an exchange of some information, this form of communications was not nearly as effective as face-to-face meetings.

For example, a meeting with officials from Nebraska could have helped DOE avoid an unfortunate incident that occurred during the first shipment of core debris. While the train was passing through Kansas, the governor of Nebraska contacted Union Pacific Railroad officials and said he would not let the train enter his state. The governor said Nebraska had not received notification of train arrival time. DOE had not been previously aware that Nebraska wanted information on time-of-arrival in the state. Until discussions between Nebraska officials and DOE resolved the conflict, the train was held at the Kansas-Nebraska border for about four hours. The adverse publicity caused by the incident was not beneficial to the transportation campaign.

SHIPMENT NOTIFICATIONS

At the time the TMI-2 core debris shipments started, DOE policy required that "courtesy communications" be provided to governors' designees in states along a route upon departure of a shipment. The notification procedure consisted of telephone contacts with state officials to advise them that a shipment was in progress.

Courtesy communications were implemented for the TMI-2 core debris shipments. In addition, states that had requested estimated-time-of-arrival (ETA) information were told when a shipment would arrive at their respective state borders (6). ETA was especially important to those states--Ohio, Indiana, Illinois, and Missouri--that conducted inspections of the shipments.

Following the first shipment of TMI-2 core debris, and as a result of the Nebraska incident previously discussed, all states were provided with ETA information, whether requested or not.

DOE policy was changed in 1987 to require that written notification be provided to states along a route seven days before the departure of a shipment. When this procedure was adopted for the TMI-2 core debris shipments, several states requested that telephone communications also be provided. Therefore, in addition to written notification, EG&G Idaho Traffic Management continued to make telephone contacts with each state, providing time-of-departure and ETA. State officials were provided with undated ETA information, if actual train times varied from scheduled times.

In September of 1986, DOE and EG&G Idaho officials needed close communications with officials in Kansas because of a freight train derailment that occurred in that state some 24 hours before a TMI-2 train was due to arrive. The derailment, along the same route used by the TMI-2 train, had damaged a bridge. Because of the damage, the governor requested that the TMI-2 train be delayed or rerouted, either of which would have caused extensive schedule delays. Union Pacific Railroad personnel worked to clear the wreckage from the bridge as the TMI-2 train continued its journey toward Kansas. Telephone discussions between officials of DOE, Union Pacific and Kansas eventually led to an agreement whereby the TMI-2 train would not cross the bridge until after it had been inspected by the Federal Railroad Administration (FRA) and was certified safe. The certification was completed minutes before the TMI-2 train arrived, and delay or rerouting were avoided.

CONTINUED COMMUNICATIONS

Communications with state officials continued at intervals between shipments, especially at times when public or political interest was high or when new technical issues required explanation. Discussions with state officials about public or political concerns in their respective states provided DOE and EG&G Idaho with insights that were helpful in dealing with those concerns. By being aware of new technical issues, state officials were better able to respond to questions from governors, members of Congress, other state officials or the public.

State officials also were requested to participate in all meetings in their respective states with local officials or the public. This allowed meeting attendees to hear both federal and state perspectives on the transportation campaign, and reassured attendees that the state was kept fully informed about the campaign. In addition, state officials provided independent verification that the shipments were being conducted in a safe manner.

Because several states conducted inspections of the shipments, state officials were also kept informed about future shipment schedules to help those officials plan their own schedules.

CONCLUSION

Transporting the damaged TMI-2 core across 10 states and some 2,400 miles of rail was a task that required close coordination and cooperation with state officials. Maintaining good communications and working relationships with the states was a key factor in success of the campaign. Many benefits to the community relations effort were realized as a result of good communications with the states. State officials often provided information complimentary to the program to the news media, answered questions factually to other state officials, governors and the public, and provided DOE and EG&G Idaho with information of a political or public nature that helped in community relations planning and conflict resolution. State officials provided independent verification that the transportation campaign was well planned and conducted safely. In conclusion, the benefits of close cooperation with state officials can be realized by others planning shipments of radioactive materials. Good relationships with state officials should be developed before shipments start and maintained during the campaign.

REFERENCES

1. "Analysis of Institutional Issues and Lessons Learned from Recent Spent Nuclear Fuel Shipping Campaigns (1983-1987)," BMI/OTSP-03, Battelle Memorial Institute (1988).
2. T. A. Smith, "Community Relations for the Transport of TMI-2 Core Debris," ANS Topical Meeting on TMI-2 Accident, American Nuclear Society, Washington, D.C., October 31 - November 4, 1988, in press (1988).
3. Memorandum of Understanding between the U.S. Nuclear Regulatory Commission and the U.S. Department of Energy Concerning the Removal and Disposition of Solid Nuclear Wastes from Cleanup of the Three Mile Island Unit 2 Nuclear Plant, Federal Register, 47 FR 16229, Published 4/15/82 (1982).
4. G. J. QUINN et al., "Transporting Fuel Debris from TMI-2 to INEL," IAEA International Symposium on the Packaging and Transport of Radioactive Materials (PATRAM 86), International Atomic Energy Agency, Davos, Switzerland, June 16-20, 1986, IAEA-SM-286-237P (1986).
5. R. C. SCHMITT et al., "Transporting TMI-2 Core Debris to INEL: Public Safety and Public Response." In: Proceedings of Waste Management 1987, Univ. Arizona Press, Tucson, Vol. 2, p.489-494 (1987).
6. "Nuclear Waste, Shipping Damaged Fuel From Three Mile Island to Idaho," GAO/RCED-87-123, August 1987, General Accounting Office, Washington, D.C. (1987).