SPENT NUCLEAR FUEL TRANSPORTATION:

PUBLIC ISSUES AND ANSWERS

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ABSTRACT

The court ordered shipping of 750 spent nuclear fuel assemblies from West Valley, New York back to their utility owners has generated considerable public and media interest. This paper discusses the specific concerns of the general public over the West Valley shipments, the issues raised by opposition groups, the interests of public officials and emergency preparedness teams as well as the media coverage generated. An analysis is performed on the effectiveness of the West Valley and utility public information programs utilized in addressing these issues, concerns and interests.

Emphasis is placed on communications which work to facilitate the shipments and generate fuel transport acceptance. Information programs are discussed which increase preparedness for nuclear shipments by emergency response teams and build public confidence in their safety. The paper also examines communications which could have further enhanced the shipping campaigns to date. Finally, plans are discussed for media preparation with interview training and press conferences. Emphasis is placed on materials provided for the media which have served to generate more favorable print and air time.

BACKGROUND

The experiences of this nuclear transportation program are heightened in significance by the forthcoming need to move spent nuclear fuel in relatively large amounts to either a monitored retrievable storage site or to a repository. Four shipping campaigns and seven states have been involved in the West Valley Demonstration Project (WVDP) fuel transfer over a two and a half year period. The fuel had been in storage at West Valley since the site served as a reprocessing center in the early 1970s. The plant is now undergoing decommissioning. The assemblies belonged to Nuclear Fuel Services Company (NFS) and four utilities (Wisconsin Electric Power, Commonwealth Edison, Rochester Gas and Electric, and Jersey Central Power and Light). Fuel returns are complete to Wisconsin, Illinois, and New Jersey. The transfers of assemblies owned by Rochester Gas and Electric and NFS will be completed in 1986.

General Public: Issues and Answers

A pattern of issues has emerged with each West Valley nuclear fuel shipping campaign. Information programs identify these issues and address misconceptions. The major issue concerning the general public is safety of the shipments. The most widely held misconception is that nuclear fuel is a liquid capable of leaking from its container. A second myth is that an accident by a motor carrier transporting spent nuclear fuel would be catastrophic. A third incorrect assumption is that the transport of spent nuclear fuel is a high risk event.

The speakers bureau at the WVDP is utilized to meet these concerns of the general public. Speaking engagements to civic groups address nuclear fuel transport in detail. Slides show clearly that nuclear fuel is a solid material. Pictures of the heavy shipping casks and the Sandia crash tests serve to highlight the integrity of the containers. Speakers discuss possible accident scenarios and outline the procedure for response. Fact sheets document the excellent safety record of nuclear materials transportation.

In order to increase public education on nuclear fuel shipping, the spent fuel storage pool is included on virtually every tour of the project. Guests view the actual fuel assemblies, the shipping casks, and the workers who move the fuel rods.

This personalized approach of the speakers bureau works to build confidence in the safety of the project. The plant tour affords a personal look at the fuel operation and demystifies the procedure. The overall benefit is to reduce unfounded fears of the general public toward nuclear fuel transport.

Concerned Environmental Groups: Issues and Answers

The issues generated by concerned groups such as the Sierra Club, the Audubon Society, and the Environmental Policy Institute center on three areas. The first issue is terrorist access to a nuclear fuel shipment. The second major issue is lack of crash testing on casks currently in use. The third contention is that emergency preparedness teams cannot handle a nuclear fuel accident.

These issues have been addressed in press conferences and in speaking engagements with public officials, civic groups, and emergency preparedness teams. The terrorist question is discussed emphasizing the preplanned routing, escort vehicles, safety checks, confidentiality of shipping times, and the ultimate durability of the casks. On the issue of cask testing, the Sandia crash tests are shown stressing the similarity between those casks and the ones used today. Computer as well as prototypical testing is also accented.

Local emergency officials receive fact sheets and press releases detailing the fuel shipments and many have visited the site for briefings and tours. In addition, West Valley radiation and safety personnel have made presentations across western New York to accident response teams. The project environmental van is available to assist communities should the need arise.

These safety programs prove beneficial to the general public and local officials. For many communities it is the first time that extensive emergency response capabilities are profiled for their citizens.

Public Officials: Issues and Answers

Most important to public officials and law enforcement personnel are the issues of routing, escort vehicles, and notification of shipments. These persons are interested in whether the route is public knowledge, whether escort vehicles are required, and if advance notice of shipments can be given.

Site conferences held by project managers for local officials serve to answer these questions. The route is detailed, use of escort vehicles is addressed and confidentiality of shipping times is explained. Officials are given a tour of the fuel storage area where they see the casks and transport trucks and meet the managers who oversee the transfer program.

This approach has worked extremely well prompting a prominent city supervisor to remark to the Buffalo News, "After touring the facility and seeing how careful they are, I feel confident they are using every precaution."

WVDP and utility company speakers have also given presentations to community officials upon request. This has afforded many opportunities to answer questions and clarify transport plans and procedures.

Media: Issues and Answers

The West Valley nuclear fuel transfer program has been covered widely in the media for a number of reasons. The transfer is the result of a court order stemming from litigation between utilities holding title to the fuel and New York State, the owner of the storage facility. Media interest is heightened because the shipments consist of highly radioactive spent nuclear fuel. Furthermore, these shipments travel on major highways and the transport times are confidential.

West Valley officials reasoned their open communications approach established at the project would serve to generate confidence in the fuel shipping program. A press conference has been held prior to the start of each fuel transfer campaign with support from each utility. Fact sheets emphasizing emergency preparedness and the safety record of nuclear materials transport are given to reporters along with pictures of the cask, transport trucks, and the fuel storage basin. Media are taken to the fuel handling area to see first hand how the operation works. Interviews with project managers are encouraged. Management is asked to emphasize safety, experience and technical expertise.

THE BOTTOM LINE: WHAT WORKED BEST

Media Communications

Communications were strengthened significantly by providing managers with media training. This resulted in their being very familiar with the issues and developing a message strategy from which to address questions. The training also instilled confidence in their ability to perform on camera.

Fact sheets were used by the media in reference to the safety record of nuclear materials transport. One news anchor relied on the fact sheet in his press pack and characterized the record as "outstanding." Copies of the Sandia crash tests were given to TV news teams. This footage reappeared on television reports documenting cask testing.

One drawback to organizing and hosting the press conferences is that the media perceived WVDP as the shipper rather than the utility companies. The distinct functions of the parties involved in the fuel transfers could have been better clarified.

Public Officials

This audience has responded best to the site tour. It is here that emergency preparedness teams and law enforcement officers can personally see the operation and the safeguards implemented. Those officials who have visited the project are more supportive of the fuel shipping program. Seeing the operation firsthand is a powerful communications tool. The viewing of the Sandia crash tapes has also served as a safety confidence builder. Many officials requested copies of the tape to show to their departments.

An area where improvement could be realized is in the notification of local officials when route changes occur. In one case where a prompt notification of change was not made, town police on the new route stopped the transport truck. A subsequent meeting with town officials paved the way for shipments to continue without interference. Nevertheless, an awkward situation could have been averted.

Concerned Environmental Groups

Project spokespeople find it more effective to acknowledge that the Sandia crash tests do not involve cask models in use at West Valley. Emphasis is placed on computer testing and the similarity of cask models used in 1977 and today.

As to the terrorist issue, the suggestion here is that this is best handled by stressing security awareness, cask durability and route planning. Avoiding use of the word 'terrorist' is also advisable given the image it conjures.

With regard to emergency preparedness, West Valley personnel find it effective to refer to safety officials on their own readiness capabilities. These local officials seem to carry greater credibility than external groups critical of area emergency response teams. Perhaps a separate tour and briefing with opposition groups would have been wise at the beginning of the program. This may have generated more support.

General Public

Site tours for interested civic groups and teachers have promoted confidence in fuel operations. Off site presentations with Sandia crash test slides and videotapes have worked well also. Public feedback indicates these audio visuals are very convincing in building a case for the shipping containers.

The speakers bureau presentations can be improved by emphasizing the excellent record of nuclear materials transport with the latest statistics. A special presentation to educators prior to the West Valley fuel transfer program would have been a valuable supplement to the early information effort.

Conclusion

A key to the fuel transfers has been the coordination of information among West Valley officials, the cask owners, and the utility companies. This has ensured consistent and correct information distribution.

The West Valley Demonstration Project will coordinate with the Department of Energy (DOE) in 1986 to transport to Idaho 125 fuel assemblies currently owned by Nuclear Fuel Services. This fuel transfer will differ in several respects from earlier campaigns. First, the DOE will take title to the assemblies. Second, the fuel will travel by rail in two new dry storage casks. Third, the transport route crosses more states than before. While the public communications program will gear itself to the particular needs of these rail transfers, the same general precept applies - accommodate the public with as much information as possible. Fulfilling the special needs of local officials and promoting operational safety to the general public and the media are important prerequisites to a smooth spent fuel transportation program.