Security Preparation for Receipt of FRR SNF at the INEEL

October 9, 1997

Presented by: Rhonda L. Dahlquist

Author
Rhonda L. Dahlquist, LMITCO

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

INEEL
IDAHO NATIONAL ENGINEERING & ENVIRONMENTAL LABORATORY
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.
SECURITY PREPARATION FOR RECEIPT OF SNF FROM THE FRR TO THE INEEL

Rhonda L Dahlquist, Lockheed Martin Idaho Technologies Co.

ABSTRACT

This paper reports the key security-related activities associated with the FRR shipment. Starting with Transportation of the SNF in the country of origin to the final destination at the INEEL. Methodology for compliance will be addressed. The graded approach and a three-step system will be explained. This paper will be used as part of the planning to support the FRR Project for returning the Asia and European SNF back to the United States.

The INEEL is preparing for the first TRIGA SNF shipment from Asia to the INEEL, which requires significant planning and effort to ensure that the shipment is adequately protected. The INEEL is coordinating with DOE-HQ, other federal agencies, states, tribes, and local governments in developing a security plan.

By providing the public with factual information about the FRR SNF Program and the non-proliferation benefits, it is felt that the public will be more tolerant of the shipments and less likely to disrupt them. Public safety and security of the shipment itself are both affected by public perception.

Through an aggressive, public education program, the INEEL’s Public Safety and Emergency Preparedness Branch is providing training courses for first responders. These training courses enhance the first responder’s ability to respond appropriately in the unlikely event of an incident involving this spent nuclear fuel shipment. Technical assistance will also be provided to supplement existing state, local, or tribal resources if any deficiencies are identified.

The INEEL consulted with DOE-HQ and DOE-Savannah River Site (SRS) to identify which agencies were involved with previous SRS shipments and determined the agencies that will be involved with the INEEL shipment. This exchange of information with SRS assisted the INEEL in the development of the INEEL’s security three-step system. This system involves the following:

- Inform and educate the public
- Prepare the agencies affected by the shipment and
- Protect the public by protecting the schedule information

Focusing on the third step of the system, protecting the public by protecting the schedule information is a very involved process. It involves the cooperation of the FRR Operators in the foreign countries and cooperation of the domestic law enforcement agencies.
In each country the INEEL must ensure that the shipper has coordinated with the FRR Operators regarding the following:

- Identify of the routes and modes of transportation proposed by the Operators
- Observe first hand any potential concerns along the routes
- Consult with host country’s security forces
- Identify host country’s regulations
- Consult with other security agencies such as the U. S. State Department

Before the shipment can start, the shipper has to ensure they have identified:

- How the shipment will be escorted and by whom
- The protective capabilities of the escorts
- The security response force who may need to respond to a request for help from the escorts
- The location of the response force in relation to the shipment during the transit

Protecting the schedule information is protected, it gives an additional measure in assisting the host country’s security forces in their job. This protective measure could eliminate the potential incidents such as:

- Organized protests along the routes
- Highly critical, biased and inflammatory media coverage
- The potential for detonation of explosive devices by radical organizations during transit

In preparing for the shipment, we plan to use a graded approach for security. The intent is to prepare for the worst case but deploy resources for normal shipment. If security assessments indicate possible security incidents could occur, then the security posture is heightened to the level necessary to protect the public and the shipment.

At the embarkation port of the host country, the shipper must ensure the shipment is protected while at the port. Control of access to the shipment while at the port, during loading, and until the ship leaves must be determined. The details must be worked out by the shipper, such as:

- Will the shipment be loaded immediately upon arrival
- Will there be a period of temporary storage and
- If so for how long
- The identification of which agencies are responsible for security and emergency response while at the port
The chain of command between each security agency must be identified and the shipper must receive names, title, telephone, fax and e-mail addresses for all contacts on security matters so the shipper can coordinate activities at the time of the shipment.

To ensure success during the ocean transit of the shipment, close coordination must be developed between the shipper and the carrier. Some of the items to be addressed are:

- Who has advanced knowledge of the route
- Escorts to be used
- Methods and Equipment needed for communications
- Emergency response and cargo monitoring

Threat assessments conducted by the shipper and by various U.S. Government Agencies and local law enforcement agencies shall provide valuable information that will enable the shipper and INEEL to make informed decisions regarding the levels of protection necessary for the shipment.

In preparation of the shipment along the domestic route, the INEEL has conducted meetings with the various security agencies. It was identified that the communications protocols need to be reviewed and improved. Lines of authority need to be understood for each phase of the shipment. Equipment needs were addressed, along with DOE support for the involved agencies concerning their special equipment needs. Providing these resources allows a greater level of assurance for the integrity of the shipment and safety of the public.

To ensure that all agencies involved understand the approach to protect the public by protecting the schedule information, training was given on the regulations. It was stressed that the Nuclear Regulatory Commission 10 CFR 73.21 regulates the spent nuclear fuel shipment schedule information. These regulations state that certain information must be protected, such as:

- Security Plan
- Schedule and itineraries for specific shipments
- Arrangements with and capabilities of local police response forces
- Location of safe havens
- Details regarding limitations of radio-telephone communications

During preparations to receive the first SNF shipment to the INEEL, it was determined that not only do we need to meet regulatory requirements, but we also need to be aware that certain activities not covered by regulations could lead to hostile entities discovering the schedule information. We identified those activities as indicators. These indicators, though not falling under NRC regulations, could be sufficient information to pinpoint the schedule of the SNF shipment. Throughout the meetings, it has been stressed for the agencies involved to approach these shipments using a graded approach as with any other hazardous material shipments.
It is important to prepare for the worst case scenario, but to deploy resources for a routine shipment. Law enforcement agencies should adjust the deployment of their security resources according to the threat assessments and other information the agencies might acquire which would cause them to heighten their security posture. A graded approach is in the best interest of the public, and this is the same approach we emphasize during the foreign stage of the shipment.

Although Savannah River Site (SRS) had a short, domestic rail transit in comparison to shipments to the INEEL, the lessons learned from the SRS shipments were very beneficial and have been incorporated in our planning for the first SNF shipment to the INEEL. Our planning and coordination efforts have been a logistical challenge because of the distance, and the number of agencies involved at various stages of the route.

We are preparing for a safe and secure shipment and we believe this can happen with a well-informed public, agencies prepared to support the operations, and by protecting the schedule information.