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NUCLEAR ENERGY  
FUEL & SERVICES  
PROGRAMS

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PROPOSED RULE PR-73(44FR 34466) (12)

GENERAL ELECTRIC COMPANY, 175 CURTNER AVE., SAN JOSE, CALIFORNIA 95125

DIVISION

DMD-337

August 9, 1979

Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

Gentlemen:



We, in General Electric Company's Spent Fuel Services Operation, appreciate the opportunity to comment on the recent amendment to 10CFR73, Interim Final Rule: Physical Protection of Irradiated Reactor Fuel in Transit. We also wish to offer for your consideration comments on NUREG-0561, the interim guidance document for implementation of the 10CFR73 amendment.

In general, we do not believe the Draft Sandia Report (SAND-77-1927) adequately establishes a basis of need for extensive regulation. Furthermore, there should be a much greater distinction between truck and rail security requirements.

A. 10CFR73 Comments

We are quite puzzled by the reasoning of the Commission with respect to this rulemaking. The NRC, in the supplementary information contained in the June 15, 1979 Federal Register (Vol. 44, No. 117, FR34467), states a reversal of its former policy of not requiring in-transit protection measures for irradiated fuel, and cites as its basis for this reversal a Sandia Laboratories study SAND-77-1927, Transport of Radio-nuclides in Urban Environs: A Working Draft Assessment. A detailed reading of Chapter 6 of SAND-77-1927, entitled Sabotage, Security and Safeguards in Urban Transit, indicates the extreme difficulty of a successful malevolent assault upon a spent fuel shipping cask. As a matter of fact,

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SAND-77-1927, does not define any mechanism by which a cask can be breached and, as a result, states in the summary (section 6.3.2):

"As unlikely as it appears, it is assumed ... that an adversary successfully sabotages a radioactive material package." [Emphasis contained in text].

Regarding the probability of attack, SAND-77-1927 specifically states on page 167:

"... there has been no attempt to quantify that likelihood."

The swiftness of this rulemaking would imply that a significant threat exists and was identified in SAND-77-1927. As noted above, that document does not identify such a threat and according to the NRC Safeguards Summary Event List (Pre-NRC through December 31, 1978) there have been no malevolent acts directed against spent fuel shipments, which to date number approximately 3500 in the civilian sector alone.

SAND-77-1927 considers the sabotage of a truck cask in an extraordinarily high population density area (NYC). The NRC has used this event as the basis for the in-transit security rules which are applied not just to NYC circumstances but rather to all modes of shipment throughout the entire nation. The situation considered by Sandia was truly a unique case and we question why it was not regarded as such in the regulation formation.

It is apparent that both SAND-77-1927 and the Federal Register supplemental information clearly focus on truck transportation. SAND-77-1927 strongly implies that rail shipments are effectively self-protecting. The inability to hijack a train, the massiveness of rail casks, the inaccessibility of rail facilities, and the fact that rail yards are not located in the center of cities in the same sense as are main highways, all indicate that in-transit security for rail shipments other than notification of NRC is necessary.

Based on our reading of SAND-77-1927, we conclude that the adequacy of the present regulations has been reconfirmed. It is therefore our opinion that the Commission's reliance on a draft assessment as a basis for this rulemaking is improper. It is our opinion that the promulgation of these rules should have followed the usual procedure by first proposing them in draft form and then issuing final rules after consideration of public comments.

B. NUREG-0561 Comments:

Many of the comments made here also apply to the corresponding requirement in 10CFR73, as amended.

In general, NUREG-0561 lacks specificity which is certain to produce a prolonged trial-and-error process between shipper and NRC, shipper and LEA and shipper and carrier to arrive at a final, approved plan. Incidentally, it should be stated in the document that all security plans are proprietary and no justification for withholding from the public is required.

Since the licensee has the responsibility for the implementation of in-transit security plans, it is essential that the licensee be fully informed regarding NRC's arrangements with law enforcement agencies (LEA). On page four (Chapter 3) under NRC Participation the text clearly limits the information provided to the licensee ("... certain elements of the information gathered ..."). The licensee should have access to any information it deems necessary to comply with these regulations.

The establishment of guidelines for unplanned detours (Chapter 4) should be NRC-produced, not licensee produced. Placing the responsibility of alternative route selection and notification with the "driver or escorts" is ill-advised. Such responsibility should lie with an administrative representative of the licensee, not an employee of the carrier or a for hire private guard. Incidentally, the terminology "driver" used throughout this document implies highway transportation only.

The avoidance of the embargoed areas (Chapter 4) by truck is possible, with some inconvenience, but rail routes are not as prevalent as highways, thus rail transport may be significantly penalized. In light of the discussion in A. above on the self-protecting nature of rail casks, we feel that there should be a graduated approach to rail movement through an embargoed area. This approach would not call for a mandatory application of Chapter 9 requirements or any additional measures for traversing the area. Rather, NUREG-0561 should detail the specific concerns of the NRC regarding these areas and define an appropriate protective measure corresponding to each concern. This would permit a tailoring of the rail routes through embargoed areas, if needed, instead of the application of a blanket policy.

Regarding route approval information, Appendix 2A, not all data can be provided in advance. The routing control of a truck is significantly different from that of a train which may contain a hundred cars or more. Each rail cask shipment between two

points is likely to be different in terms of elapsed time and stopping points. Furthermore, a multi-element rail cask can have a per-shipment variation of weight and contents. The cask serial numbers may not be known ahead of the actual shipment. Much of the required information seems unrelated to the matter of in-transit protection.

An inherent part of rail shipping is stopping en route for switching, picking up or dropping off cars, reblocking trains, transferring to another line, etc., and as such, makes the applicability of Chapter 5 to rail shipping questionable. This chapter again implies truck shipment and separate guidelines should be created for rail movement.

The training requirements of Chapter 7 (7.1) and Appendix D (10CFR73) need clarification. The topics are listed but the degree of proficiency is not defined. Testing and retraining are not discussed. Some topics appear excessive or unnecessary considering that in-transit protection is the objective.

Regarding the use of armed guards in special circumstances, the document contains no guidelines or references to regulations pertaining to the use of force to protect the cask. This controversial question must be specifically addressed by the NRC. Similarly, there is neither a definition of what constitutes a "threat" to the package nor NRC suggested actions in response to such "threats".

#### C. Summary

We believe that the promulgation of this amendment to 10CFR73 is premature and the procedure followed reflects an unsupported alarmist philosophy. The resultant regulations are based on a single draft study of a single mode of shipping in a unique population center. This same study devotes much space to the discussion of the difficulty of cask sabotage, yet the validity of this portion was apparently dismissed.

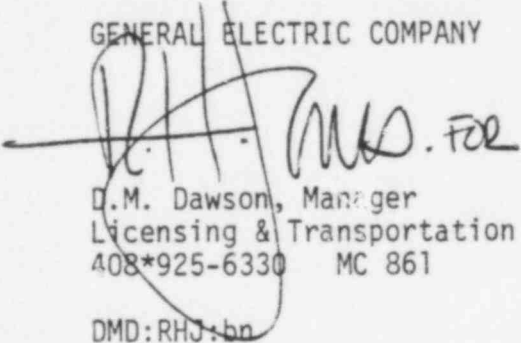
Both the regulations and the interim guidance document (NUREG-0561) are so general that compliance and implementation become quite difficult and the specific details of compliance may be subject to severe "ratcheting" by overzealous regulators. Furthermore, in the regulations and the guide there is little differentiation between highway and rail movements, whereas in actuality the differences are significant. We believe that rail casks are essentially self-protecting and require far less monitoring than truck casks. We hope that a more detailed study of both the regulation and the

interim guidance document will be conducted, including a cost-benefit analysis, and appropriate adjustments made. Until such a study is conducted we suggest the suspension of these new regulations.

Thank you again for the opportunity to comment.

Respectfully,

GENERAL ELECTRIC COMPANY



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