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August 17, 1979

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

Subject: Interim Final Rule Governing the Physical Protection of Irradiated Reactor Fuel in Transit

Reference: 10 CFR Part 73 as Amended - Federal Register Vol. 44, No. 117 dated Friday, June 15, 1979

Dear Sir:

Attached are Tri-State Motor Transit Co.'s comments on the above subject rule.

Yours very truly,

TRI-STATE MOTOR TRANSIT CO.

C. H. Mayer

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NUCLEAR REGULATORY COMMISSION

Subject: Comments relative to Interim Final Rule Governing the Physical Protection of Irradiated Reactor Fuel in Transit

Reference: 10 CFR Part 73 as Amended - Federal Register Vol. 44, No. 117 dated Friday, June 15, 1979

The Interim rule adapted by the Nuclear Regulatory Commission (NRC) appears to have been conceived with a sense of urgency that precluded careful evaluation of all safety and security factors that are associated with the highway transportation of irradiated reactor fuel. It is our opinion that a more hazardous situation from a safety and security standpoint will be incurred by the implementation of this rule.

The stated purpose of the rule is to minimize the potential radiological consequences arising out of an act of sabotage. However, they force the use of secondary roads which we feel are far more hazardous than using Interstate highways. The reasons for this conclusion are stated as follows:

1. Interstate highways have a high visibility factor, both within and without urbanized areas, and have a short response time frame for emergency assistance. Secondary roads have a relatively low visibility factor and a longer emergency response time frame. It is our opinion that the probability factor involving a covert action such as an attempted hijacking is far greater in a low visibility area where emergency response would be slower and less effective than that of an urbanized area.

2. Deviation from urbanized areas significantly reduces the effective range of the radio-telephone and renders its requirement virtually pointless.

3. Interstate highways are two or more lanes of traffic moving in the same direction and have an even traffic flow with limited ingress and egress. By comparison, secondary roads are usually two lanes in opposite directions with frequent intersections and junctions with interupted traffic flow. This characteristic of the secondary road, with its low visibility factor, will significantly impair detection and recovery of an unauthorized diversion of a spent fuel shipment.

4. Generally, the circumventing of urbanized areas will significantly increase the overall transit time which is contrary to one of the objectives of the rule to reduce transit times to a minimum. It is also contrary to security criteria and thinking used in the development of safeguard procedures for the transportation of strategic quantities of SNM material.

5. The total increased miles traveled, with many on secondary roads, will result in a predictable increase in accidental deaths and injuries of people. It will also result in a predictable increase in the total radiation exposure to the drivers of the transport vehicles and the general public.

We seriously question if an effective armed escort force can be obtained through local law enforcement agencies. (NUREG, page 29 - Additional Measures)

In the past, we have found that these agencies are undermanned, over worked and not the least inclined to provide this type of service. At best, they will offer off duty personnel which poses significant problems with regard to jurisdictional areas and scheduling. It is our opinion that dependency on local law enforcement agencies for escort service, whether they be comprised of off duty or on duty personnel, is unwise and unworkable from a practical standpoint.

It is our recommendation in this regard that the same procedures be followed that are used in security transportation for strategic quantities of SNM material. In this case, law enforcement agencies telephone numbers are available to summon assistance if necessary.

The rule does not seem to have been developed in light of rational consideration of potential hazards to the general public, but is overly biased towards the singular objective of reducing the consequences of an act of sabotage in a heavily populated area, without regard to the relative potential of hazard to the general public.

We feel that diverting shipments of spent fuel onto secondary highways with an erratic traffic flow pattern, exposure to pedestrian traffic, bicycle riders, school buses and slow moving vehicles poses a far more potentially greater hazard to the public than that of shipments moving within urbanized areas. Additionally, we feel that moving these shipments through populated areas falling outside the criteria for embargoed areas with unrestricted access roads subjects this segment of the general public to unnecessary risks. The total increased mileage and use of secondary roads involving much more stop and go driving will result in a very significant increase in fuel consumption for these shipments. It has not been demonstrated that the risks associated with present routing practices warrant this increased consumption of fuel.

Subsection 73.37 (b)(2) and NUREG-0561, S 7.2 address new communications requirements, which provide that the transport vehicle, or the escort vehicle, if one is used, be equipped with a radio-telephone and CB radio or approved equivalents and that call-ins to a designated location are to be made at least every 2 hours. The requirement for 2 hour check calls cannot be complied with in some areas using the single-vehicle concept. In the single-vehicle, two-person operation, one of the individuals normally would be in the truck's sleeper berth. When radio-telephone calls can be made, the individual driving could stop the truck to make the call from the tractor. In locations where radio-telephone communications are marginal or ineffective, which are many, (as the Interim Guidance at page 23 itself recognizes) the individual driving would have to find a public land-line telephone from which to make the call. This may be difficult in rural areas. In urban areas, it would require another stop, which is contrary to the requirement of 73.37(a)(4). It also would necessitate one of the individuals leaving the tractor, requiring the individual in the sleeper berth to arise. Such in turn would violate the Department of Transportation safety regulations governing hours of service of drivers. See 49 CFR S 395.3 (1978). If the requirement for check calls were increased from 2 to 4 hours, shipments could operate within the requirements of the aforementioned regulations. This also would minimize

the number of times the shipments would be stopped, at which time they are most vulnerable to hijacking or sabotage.

It is our understanding that the Commission may make irradiated reactor fuel transportation routing information available to the general public. This would appear to be contrary to the intent of Section 73.37 and, in our opinion, not in the best interests of providing maximum practical security for the shipments.

Although it may be argued that the requirements of this rule apply to NRC licensees, it is tantamount to pseudo regulations of the carrier and appears to violate the intent of the recent Memorandum of Understanding between the NRC and the Department of Transportation (DOT). Further, the NRC's abrogation of its preemptive authority by giving precedent to local routing restrictions over that of embargoed areas (NUREG page 8, II:B) will have an adverse effect on the DOT routing rule now being developed as a result of New York City's ban on radioactive shipments.

RECOMMENDATIONS

We recommend that the portion of the Interim rule dealing with routing be withdrawn pending a complete evaluation and determination if the hypothetical risks to health, life and property justifies the predictable increases that will incur as a result of implementation of this rule. Such an evaluation might well be in the form of an environmental impact statement. We would also suggest that such an evaluation consider a comparison of the probable effects of sabotaging an irradiated reactor fuel shipment with those resulting from sabotaging shipments of other highly hazardous and toxic commodities.

We recommend that the 2 hour communication requirement be changed to 4 hours to minimize stops and avoid conflict with DOT regulations.

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