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Washington, D.C. 20545

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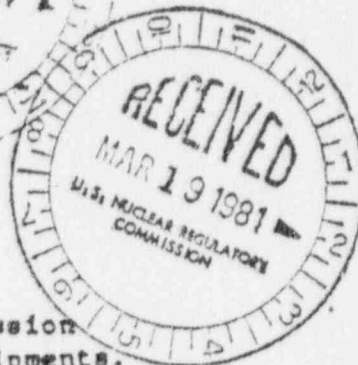
[45 FR 81058]

DOCKET NUMBER

PROPOSED RULE PR-73

[45 FR 81060]

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MEMORANDUM FOR Samuel J. Chilk
Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

The Department of Energy has reviewed the Nuclear Regulatory Commission proposed rules concerning advance notification of nuclear waste shipments, revisions to 10 Code of Federal Regulations (CFR) Parts 71 and 73 (45 Federal Register 81058 and 81060 respectively, December 9, 1980).

Although these proposed regulations would generally not apply to shipments by or for the Department of Energy, the Department believes the scope of the proposed rules should be limited to special shipments of radioactive wastes which have been exempted from the packaging requirements of 10 CFR Part 71 pursuant to Section 71.6.

The Department also believes that the proposed amendments to 10 CFR Part 71 and 73 would adversely impact shipment activities in interstate commerce by creating undue administrative and economic burdens upon shippers, carriers and the state agencies. Further, these new measures could be counterproductive to the nation's long established procedures involving the safety and security for shipments of radioactive materials.

The Department's comments and recommendations (Enclosure 1) are being forwarded to you along with more specific comments and recommendations received from the Department's Deputy Assistant Secretary for Naval Reactors, Admiral R. G. Rickover, (Enclosure 2).

It is requested that the comments and recommendations in both enclosures be considered in connection with the proposed amendments.

We shall be pleased to discuss our comments with you at your convenience. In this regard you may wish to contact Mr. Michael J. Lawrence, Director, Office of Transportation and Fuel Storage on 353-4728.

Sheldon Meyers

Sheldon Meyers
Deputy Assistant Secretary
for Nuclear Waste Management
Office of Nuclear Energy

2 Enclosures

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THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

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Enclosure 1

DEPARTMENT COMMENTS

1. No Significant Hazard

Both proposed notification rules were issued pursuant to Section 301 (a) of Public Law 96-295. This law permits the NRC to exempt from notification requirements nuclear wastes which "... do not pose a potentially significant hazard to the health and safety of the public". However, the Nuclear Regulatory Commission has proposed to include in the notification requirements Type B shipments of waste, including spent fuel. This approach would not be consistent with the intent of the existing regulations published under 10 CFR Part 71 in that Nuclear Materials packaged in Type B containers in compliance with 10 CFR 71, do not pose a significant hazard to public health and safety. The position of the Department of Energy is that such shipments should be exempted from the notification requirements because they "do not pose a potentially significant hazard to the health and safety of the public."

It is apparent that the intent of Congress in enacting Section 301 of P.L. 96-295 "... allows NRC to exempt shipments of waste types and quantities that do not pose a hazard to public health and safety" (Conference Report, H. Rept. No. 96-1070, page 36 (emphasis added)). That the "... conference agreement ... allows NRC to exempt shipments of waste ..." is to say that the "shipment", including its packaging, should be evaluated as to its potential hazard by NRC in determining applicability of notification requirements.

The transportation of radioactive materials does not significantly increase risk to the public health and safety. The NRC has supported this premise in the "Final Environmental Impact Statement on the Transportation of Radioactive Material by Air and Other Modes", NUREG-0170, Volume 1, Page viii, which states that "... the environmental impacts of normal transportation of radioactive material and the risks attendant to accidents involving radioactive material shipments are sufficiently small to allow continued shipments by all modes" and "... transportation conducted under present regulations provides adequate safety to the public ...". Indeed the safety experience in shipping nuclear material is exemplary in comparison with the shipment of all other hazardous materials.

Other risk analyses agree with the conclusion that the risk to public health and safety is extremely small (e.g., SLA-74-001, SAND 76-0708, SAND 77-0001, SAND 77-1927, and NUREG CR-0743). Further, when the small contribution of Type B wastes is considered in the overall perspective of nuclear shipments addressed by NUREG-0170 and other studies, the risk due to Type B wastes are indeed miniscule.

The Department proposes that notification be required only for those special types of waste shipments which cannot fully comply with the packaging requirements of 10 CFR 71.

2. Advance Notification Does Not Reduce Risk

The major contributor to those small risks that exist with radioactive waste transport is the inherent radiation associated with the shipment and corresponding exposure to persons in contact with the shipment. Any procedures associated with prenotification in which additional personnel are exposed such as inspections, convoys, positioning of emergency response personnel or additional escorts could increase the quantifiable risk.

Advance notification will also increase the possibility of malevolent actions directed at these shipments. The more people that are made aware of these shipments, the more likely that a malevolent act may occur.

3. Advanced notification would be costly

The number of applicable shipments is projected to be 24,000 per year in 1985. Although the degree of additional burden cannot be fully determined until Federal, shipper, state and local procedures are developed, it is clear that more paper work and more people will be required at all levels. This will result in a significant additional financial burden on shipments of these materials. The Department recommends that advance notification not be required.

4. The Information is Already Available

NRC Agreement States already have existing surveillance systems which monitor the nuclear materials moving across State boundaries. All states have weigh stations and checkpoints at which information could be obtained, if desired.

Each shipment is presently placarded to indicate the category of hazardous material being shipped and also is accomplished by shipping documents describing the material, origin, and destination.

The Department of Transportation (DOT) Rulemaking on Highway Routing of Radioactive Materials, HM-164, will require post-notification to DOT of these shipments. Post-notification data will then be available to the states through DOT on all applicable radioactive shipments, not only waste, and will therefore be a more effective basis for emergency response planning.

The Department recommends that the NRC investigate and implement the existing avenues for obtaining information on waste shipments. Since the NRC proposed rules appear unnecessary from the information perspective as well as unnecessary for protection of the public health and safety, NRC should perhaps work with the Senate Committee on Environment and Public Works and with the House of Representatives Committee on Interior and Insular Affairs to amend Public Law 96-295, deleting the requirements of Section 301.

5. Means to Limit the Burden are Needed

States will find that some or all of the information proposed to be submitted will not be required. A procedure for States to apply to receive some or all the information should be implemented, instead of automatically including all states. A bi-annual re-application by States to continue to receive the information desired would help limit the unnecessary burden.

6. Federal Preemption Needed

The subject NRC rulemakings presently propose additional Federal requirements, without diminishing state and local prerogatives in this area. The rulemakings should establish clear Federal occupation of the notification area.

7. Greater Security Needed

Since advance notification will increase awareness of these shipments and the possibilities for malevolent actions directed at the shipments, the Department requests that both the rulemakings provide for penalties for improper use or dissemination of the advance notification information.



Enclosure 2

Department of Energy
Washington, D.C. 20585

MEMORANDUM FOR Deputy Assistant Secretary for Nuclear Waste Management

FROM: H. G. RICKOVER

SUBJECT: Proposed Nuclear Regulatory Commission Regulations for Advance Notification to States of Transportation of Certain Types of Nuclear Waste

Section 301(a) of Public Law 96-295 directed the Nuclear Regulatory Commission (NRC) to promulgate regulations providing for the timely notification to the Governor of any state prior to the transport of nuclear waste, including spent nuclear fuel, through such state. This law also contains provisions that such notification shall not apply to nuclear waste in such quantities and of such types as the NRC specifically determines do not pose a potential significant hazard to the health and safety of the public.

In response to Public Law 96-295, the NRC published proposed changes to the Code of Federal Regulations, Title 10, Parts 71 and 73 to require advance notice to the Governor of any affected state prior to shipments of waste defined as Type B or large quantity and prior to shipments of spent fuel. NE-343 memorandum dated December 18, 1980 forwarded the NRC proposed regulations for comment.

Naval Reactors has reviewed the proposed regulations and considers them excessive and impractical as indicated by the following comments. Specific recommendations concerning these regulations are provided.

- a. The NRC has included Type B and large quantity waste shipments in the requirements for advance shipment notification to civilian authorities simply because these container designs require specific structural standards. Categorically including such shipments in a hazard class comparable to spent fuel is clearly inappropriate. The limitations on Type B quantities of material in conjunction with the design requirements for Type B containers result in a degree of protection comparable to the lesser Type A shipments which the NRC excluded from the rulemaking as not posing a potentially significant hazard to the public. The inconsistency of including Type B shipments with spent fuel shipments is further apparent by recognizing that a Type B shipment, which could involve tens of curies, is being compared to a spent fuel shipment, which could involve millions of curies. Additionally, certain large quantity shipments could involve special form irradiated materials which pose a minimal hazard because of their non-dispersability. Public Law 96-295 states, "Such notification requirement shall not apply to nuclear waste in such quantities and of such types as the Commission specifically determines do not pose a potentially significant hazard to the health and safety of the public." This clearly indicates that degree of technical judgment can be made which NRC appears to forego. The extensive treatment of accident risks presented in NUREG 0170, The Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes appears to be all but ignored by the NRC. Consideration must be given to the specific accident and the amounts

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Naval Reactors Recommendation: The NRC should be requested to revise their definition of hazardous materials with respect to the requirements for advance state notification. A logical basis would be to apply the advance notice requirements to shipments of spent fuel and to shipments of other material which reflect a comparable hazard to spent fuel when evaluated in terms of the quantity, nuclides and dispersability involved. A blanket requirement for advance notification of Type B and large quantity shipments should not be imposed.

- b. There is a potential for future impact by including Type B and large quantity radioactive material shipments in these regulations. Although the draft regulations only apply to "waste," it will be difficult to defend why only "waste" shipments of Type B or large quantity require notification and not the vast number of the same types of shipments being made that are not radioactive waste. Following the same procedures for these non-waste shipments would clearly overburden the shippers and the states. Further, treating Type B and large quantity shipments in the same category as spent fuel could result in the interpretation that spent fuel physical security requirements should apply to lower quantity shipments, an extension that is clearly not warranted.

Naval Reactors Recommendation: The NRC should be requested to evaluate the total impact of their proposed rulemaking and to ensure that the proposed rules will not expand, by implication, into other areas.

- c. The NRC appears to acknowledge the difference between the Type B and large quantity waste shipments compared to spent fuel shipments by requiring notification of the estimated time of arrival in the state within six hours for spent fuel vice the requirement to estimate arrival within seven days for the waste material. However, the value of an advance seven day notification is questionable. It does not appear to serve any purpose other than to inform the states about the material that is traveling through the state in general and consequently could be done on a generic one time basis in a document such as the previously referenced, NUREG-0170.

Naval Reactors Recommendation: - The requirement for pre-notification should be eliminated when such a requirement would essentially provide only statistical information. Generic one time reports should be used to provide this data to states, if considered necessary at all.

- d. The NRC requires that information on the actual timing of a specific spent fuel shipment be protected, like classified information, from unauthorized disclosure. This information would be "declassified" after completion of the shipment. The protection system proposed by the NRC requires a sealed inner envelope with shipment dates and times to be included with the basic correspondence concerning origin, destination, carrier, routing, and other shipment information. This inner envelope would have limited distribution to authorized state personnel. It is questionable whether a staff office, that is not accustomed to handling classified material, will in fact be able to maintain the required control. Also, the information released on origin, destination, carrier and routes, coupled with the volume and timing of communications and the knowledge of past shipment timing will provide the basis for being able to interdict shipments.

Naval Reactors Recommendation: All the specific details regarding a particular shipment should be handled as protected information and should not be arbitrarily released after the shipment. A better method than that proposed should be developed to transmit this information to the states desiring the information. This would help prevent disclosure to unauthorized individuals.

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- e. The NRC considers that the impact of the advance notification requirement may be lessened since the Department of Transportation (DOT) is separately considering a requirement for reporting shipment information to DOT for large quantity shipments and Type B shipments. These DOT regulations which have been issued are not nearly as cumbersome or all-inclusive as those proposed by the NRC and therefore will not appreciably lessen the impact of the NRC regulations. The regulations of the DOT require advance notification of shipment to the consignee prior to shipment of Type B, large quantity or fissile radioactive material and only require an after-the-fact report to DOT of the route for large quantity highway shipments. The NRC proposed regulations are clearly more extensive than those of the DOT. However, the DOT data collected on routing could be used to satisfy the generic report recommended in comment c. above.

Naval Reactors Recommendation: The NRC should be requested to reassess the impact of their proposals in the light of the actual DOT regulations.

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- f. For those cases where the NRC concludes that specific shipment advance notification is required, compliance will be extremely difficult considering the last minute route and schedule changes that frequently occur while in transit. This is especially true for rail shipments.

Naval Reactors Recommendation: Methods for handling last minute route or schedule changes, due to detours etc., needs to be addressed.

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- g. The application of the proposed rule to water or air shipment is unclear.

Naval Reactor Recommendation: The application to waterborne and airborne shipments needs to be clarified.

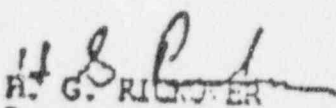
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- h. A consequence of the proposed rule for large quantity and Type B shipments is to essentially require exclusive use vehicles since the routing and timing of shipments cannot be controlled in common carrier service.

Naval Reactors Recommendation: The impact on transportation costs of eliminating common carrier service should be evaluated.

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- i. In the discussion of the proposed rules, the NRC recognizes it is possible that some governors might prefer not to receive these advance notifications and should therefore be allowed to be removed from the notification list. This option is not included in the specific regulations.

Naval Reactors Recommendation: The option for some governors to decline advance notification should be written into the specific rules to clearly identify that provision of such information is dependent upon individual state preference and is not mandatory. Provision for giving advance notification in a generic basis vice a shipment-specific basis should be

4. DOE is requested to forward these comments and recommendations to the NRC for consideration in their final rulemaking.


H. G. RINDNER
Deputy Assistant Secretary
for Naval Reactors