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Rev. 4

Public Information Circular for Shipments of Irradiated Reactor Fuel

**U.S. Nuclear Regulatory
Commission**

Office of Nuclear Material Safety and Safeguards

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Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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PREFACE

This circular has been prepared in response to numerous requests for information regarding routes for the shipment of irradiated reactor (spent) fuel subject to regulation by the Nuclear Regulatory Commission (NRC). The NRC staff approves such routes prior to their first use, in accordance with the regulatory provisions of 10 CFR Part 73.37. The objective of the safeguards regulations contained in 10 CFR Part 73.37 is to provide protection against radioactive dispersal caused by malevolent acts by persons. The design and construction of the casks used to ship the spent fuel provide adequate radiological protection of the public health and safety against accidents. Therefore, transporting appropriately packaged spent fuel over existing rail systems and via any highway system is radiologically safe without specific NRC approval of the route. However, to assure adequate planning for protection against actual or attempted acts of sabotage, the NRC requires advance route approval. This approval is given on a shipment-by-shipment or series basis, it is not a general approval of the route for subsequent spent fuel shipments.

Spent fuel shipment routes, primarily for road transportation, but also including two rail routes, are indicated on reproductions of road maps. Also included are the amounts of material shipped during the approximate 5-year period that safeguards regulations have been effective. This information is current as of June 1, 1984.

Section 147 of Public Law 96-295 provides that "...the public disclosure of information pertaining to the routes and quantities of shipments of... irradiated nuclear reactor fuel" shall not be prohibited. The maps and tables dealing with the spent fuel shipment routes and quantities included in this document are intended to facilitate the public disclosure of spent fuel shipment information. In addition, the Commission has chosen to provide information in this document regarding the NRC's safety and safeguards regulations for spent fuel shipments as well as safeguards incidents regarding spent fuel shipments (of which none have been reported to date). This additional information is furnished by the Commission in order to convey to the public a more complete picture of NRC regulatory practices concerning the shipment of spent fuel than could be obtained by the publication of the shipment routes and quantities alone.

The enclosed route information reflects approvals that have been granted in response to specific requests for shipments of spent fuel. It is not published to be used by carriers for authority to ship other categories of nuclear waste or other materials.

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SPENT FUEL SHIPMENTS ROUTES
UNITED STATES (CONTIGUOUS)

ARIZONA

CALIFORNIA

CONNECTICUT

IDAHO

A-6

2

A-8

INDIANA

IOWA

KANSAS

A-10

MARYLAND

MASSACHUSETTS

2

2

MONTANA

2

NEBRASKA
--- RAIL ROUTE

NEVADA

2

NEW YORK

NORTH CAROLINA

— — RAIL ROUTE

NORTH DAKOTA

OKLAHOMA

A compass rose with eight points. The top point is marked with a stylized 'N' for North. The rose is enclosed in a circular border with tick marks.

2

2

TENNESSEE

TEXAS

VERMONT

VIRGINIA

WISCONSIN

WEST VIRGINIA

2

WYOMING

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