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November 13, 1981

FLD/81/82/ETS

Director, Division of Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Gentlemen:

The Atomic Energy of Canada Limited Research Company has requested the Nuclear Assurance Corporation, acting as their agent, to request approval for certain alternate routes for the planned irradiated fuel shipments from the Chalk River Nuclear Laboratories to the Department of Energy's Savannah River facility.

In accordance with their request and with the guidelines for submittal contained in NUREG-0561, the following information is provided:

1. Cargo Description

- (approximately) 150 NRU and NRX aluminum-uranium alloy fuel rods
- Model No. NLI-6502, AECL Cask Package No. USA/9103/B()F
- Loaded weight of transport vehicle is (approximately) 70,000 lbs.

2. Anticipated Schedule

- Six shipments, (approximately) 25 assemblies per shipment
- Shipment campaign duration is 10 weeks (estimate)
- Proposed start date is May 18, 1982

3. Route Description

- Origin: Atomic Energy of Canada Limited
Chalk River Nuclear Laboratories
Chalk River, Ontario, Canada K0J 1J0

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HJD XA

PDR x PDR
ISNM-51005

- Destination: U. S. Department of Energy
 Savannah River Operations
 E. I. du Pont de Nemours & Co.
 Savannah River Plant
 Dunbarton, South Carolina 29801
- Proposed Route

Four alternate routes for these shipments are proposed, designated as indicated below.

<u>Alternate Route 1</u>	<u>Miles</u>
AECL site to Port of Entry	- 484
Port of Entry: Port Huron, MI	-
Port of Entry to I-94	- 0
I-94 West to Michigan 21	- 5
Michigan 21 West to US-23	- 66
* US-23 South to I-475	- 95
I-475 South to I-75	- 14
I-75 South to I-275	- 174
I-275 South to I-75	- 40
I-75 South to I-40	- 56
I-40 East to I-26	- 112
I-26 South to SC-121	- 137
SC-121 South to SC-19	- 47
SC-19 South to SRP	- 29
<u>Alternate Route 2</u>	<u>Miles</u>
AECL site to Port of Entry	- 117
Port of Entry: Alexandria Bay, NY	-
Port of Entry to I-81	- 0
I-81 South to I-77	- 673
I-77 South to I-85	- 127
I-85 South to I-26	- 68
I-26 South to SC-121	- 137
* SC-121 South to SC-19	- 47
SC-19 South to SRP	- 29
<u>Alternate Route 3</u>	<u>Miles</u>
AECL site to Port of Entry	- 301
Port of Entry: Champlain, NY	-
Port of Entry to I-87	- 0
I-87 South to I-84	- 268
I-84 West to I-31	- 196
I-81 South to I-77	- 464
I-77 South to I-85	- 127
I-85 South to I-26	- 68

<u>Alternate Route 3 (continued)</u>	<u>Miles</u>
I-26 South to SC-121	- 137
* SC-121 South to SC-19	- 47
SC-19 South to SRP	- 29

<u>Alternate Route 4</u>	<u>Miles</u>
AECL site to Port of Entry	- 357
Port of Entry: Derby Lane, VT	-
Port of Entry to I-91	- 0
I-91 South to I-84	- 261
I-84 West to I-81	- 196
I-81 South to I-77	- 464
I-77 South to I-85	- 127
I-85 South to I-26	- 68
I-26 South to SC-121	- 137
* SC-121 South to SC-19	- 47
SC-19 South to SRP	- 29

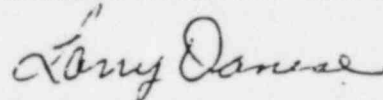
* Returns to the route approved on June 24, 1981 for these shipments.

The specific assemblies to be shipped have not yet been selected; however, the shipments will be made in accordance with the cask Certificate of Compliance.

Please address comments or questions regarding this submittal to the undersigned.

Yours truly,

NUCLEAR ASSURANCE CORPORATION



F. L. Danese
Manager, Cask Operations

FLD:bam