The Honorable Russell D. Feingold
United States Senate
Washington, DC 20510

Dear Senator Feingold:

Thank you for your letter of October 1 concerning the proposed shipment of radioactive material through the Great Lakes and St. Lawrence Seaway by the Canadian company, Bruce Power, Inc (Bruce Power). The mission of the Pipeline and Hazardous Materials Safety Administration (PHMSA) is to protect people and the environment from risks associated with the transportation of hazardous materials. Safety and environmental protection are our top priorities.

I hope the following responses address your questions:

Q1: Does PHMSA have the authority to make exemptions that are not in accordance with the International Atomic Energy Agency regulations or its own safety standards?

PHMSA is the U.S. regulatory body, or competent authority, for all hazardous materials transportation into, out of and through the United States. Every shipment of hazardous materials that enters the U.S. must meet the level of safety in the regulations. PHMSA has authority to consider systems of transport not presently defined in the U.S. Hazardous Materials Regulations (HMR) or the International Atomic Energy Agency (IAEA) transport safety regulations, as adopted in the HMR. If the characteristics of a proposed shipment differ from those described in the HMR, PHMSA may grant an approval or special permit that includes terms and conditions to ensure a level of safety equivalent to or exceeding that in the regulations.

Q2: What are PHMSA’s requirements for meeting the two aforementioned standards prior to its approval of the shipment?

As stated above, an applicant must demonstrate that the alternative proposed in the application for revalidation, as authorized in 49 C.F.R. 173.473 (a)(1), will meet or exceed the level of safety required in the regulation.

Q3: Will PHMSA be complying with the National Environmental Policy Act, and how will the agency ensure public participation and transparency?
Bruce Power has yet to receive approval ("validation") from the Canadian Nuclear Safety Commission (CNSC). While Bruce Power has provided preliminary materials to PHMSA, we will not accept an application from the company until the CNSC issues a validation. At that point, PHMSA would begin considering Bruce Power’s application for a special arrangement (the international equivalent to our special permit). PHMSA will comply with the National Environmental Policy Act.

**Q4: Has PHMSA ever authorized a shipment of comparable size and radioactive content (sixteen nuclear steam generators, or its equivalent)?**

Over the last two decades, PHMSA has authorized the domestic shipment of over 80 large components removed from service from U.S. nuclear power plants. Many of these components were significantly larger and heavier than the Bruce Power steam generators.

Approximately half of the transports were by road or rail, and the other half were by vessel. Even if the major portion of the transport were by rail or vessel, a short motor vehicle transport leg was often necessary. Most of these transports required some relief from the established regulations. In those cases, compensatory measures were required to demonstrate an equivalent level of safety. All transports were conducted safely and without any significant incidents.

According to the radioactive material relative hazard criteria provided in the IAEA transport safety regulations and the HMR, almost all of the prior U.S. consignments had a lesser radioactive hazard than the proposed Canadian steam generator transport. That was due primarily to differing power plant design radiochemistry, as well as the fact that fewer components were being transported at a given time.

Additionally, please provide us any evaluation, review, public comments, and approval documents related to other shipments of radioactive material in U.S. waters.

Radioactive material shipments are transported routinely in U.S. waters in full compliance with the regulations. The following nuclear power plant large components have been transported in U.S. waters pursuant to an approval or special permit granted by PHMSA:

- Salem Unit 1, 4 Steam Generators (SGs) – Hancock’s Bridge, NJ to Barnwell, SC
- St. Lucie Unit 1, 2 SGs – Jensen Beach, FL to Barnwell, SC
- Trojan, 1 Reactor Vessel (RV) – Ranier, OR to Richland, WA
- Connecticut Yankee, 4 SGs – Haddam Neck, CT to Barnwell, SC
- Maine Yankee, 3 SGs & 1 Pressurizer (PZR) – Wiscasset, ME to Memphis, TN
- Maine Yankee, 1 RV – Wiscasset, ME to Barnwell, SC
- Connecticut Yankee, 1 RV – Haddam Neck, CT to Barnwell, SC
- Kewaunee, 2 SGs – Kewaunee, WI to Memphis, TN
- Surry Unit 2, 1 Reactor Vessel Head (RVH) – Surry, VA to Memphis, TN
- Farley Units 1 & 2, 2 RVHs – Dothan, AL to Houston, TX
Millstone Unit 2, 1 RVH – Waterford, CT to Houston, TX
Turkey Point Units 3 & 4, 2 RVHs – Florida City, FL to Memphis, TN
Salem Units 1 & 2, 2 RVHs – Hancock’s Bridge, NJ to Memphis, TN
Calvert Cliffs Units 1 & 2, 2 RVHs – Lusby, MD to Memphis, TN
St. Lucie Unit 1, 1 RVH & 1 PZR – Jensen Beach, FL to Memphis, TN
Salem Unit 2, 4 SGs – Hancock’s Bridge, NJ to Barnwell, SC
St. Lucie Unit 2, 2 SGs & 1 RVH – Jensen Beach, FL to Memphis, TN

Documentation for each of these transports consists of hundreds of pages and is provided on the enclosed disc.

We would also appreciate receiving an explanation of PHMSA’s radioactive shipment review and approval process, along with describing the roles of and coordination with other federal agencies, including but not limited to the U.S. Coast Guard and the Nuclear Regulatory Commission.

PHMSA conducts a technical review of any requested relief from the IAEA transport safety regulations or the HMR. We involve other applicable federal agencies as stakeholders. In this instance, if relief were requested, we would solicit input from the U.S. Coast Guard and the Nuclear Regulatory Commission.

Finally, please notify us immediately upon receiving a request for revalidation to Bruce Power’s proposed shipment.

By letter dated August 1, 2010 we were notified by Bruce Power that they intend to submit a request to PHMSA for revalidation since the transport will be entering U.S waters. The correspondence contained early technical information the company had provided to the CNSC. Additional information has been exchanged between those parties during the Canadian review process.

A two-day hearing was recently conducted in Canada. We will notify you immediately upon receiving a request for revalidation of a Canadian certificate pertaining to Bruce Power’s proposed shipment, assuming an applicable certificate is issued by the CNSC. It should be noted that although Canada may approve the initial certificate, the U.S. is in no way bound by their approval. The U.S. may require additional conditions or elect not to revalidate.

I hope this information is helpful to you. An identical response has been sent to Senators Robert P. Casey, Jr., Kirsten E. Gillibrand, Carl Levin, Debbie Stabenow, Richard J. Durbin, and Charles E. Schumer.
If I can be further assistance, please do not hesitate to contact me or Julia P. Valentine, Associate Administrator for Governmental, International and Public Affairs, at (202) 366-4831.

Regards,

Cynthia L. Quarterman

Enclosure