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July 25, 2014

Honorable Ernest J. Moniz
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Secretary Moniz:

I would like to convey my office's serious concerns regarding the proposed multiple shipments by truck of extremely radioactive highly enriched uranium in liquid form from Chalk River, Ontario, Canada to the Department of Energy's Savannah River facilities near Aiken, South Carolina. The most direct route from Chalk River to South Carolina is through New York, crossing either the St. Lawrence or Niagara River. Even if these shipments proceeded via much longer routes west of New York, they would cross the Great Lakes watershed, which flows east into New York. The Department has announced that it plans to start shipping these materials in September 2015. As we understand, thousands of gallons of liquid highly enriched uranium are proposed to be transported in shipments that could total more than one hundred truckloads.

Liquid highly enriched uranium once released would threaten people and the environment at large. The danger to anyone coming into close contact with these extremely radioactive materials could be devastating. In addition, once released, these radioactive liquids can enter surface waters and groundwater. The radionuclides in such releases are long-lived and can bioaccumulate, posing risks for drinking water ingestion and fish consumption, among others. See, e.g., G.T. Jannick, *Critical Radionuclide/Critical Pathway Analysis for the U.S. Department of Energy's Savannah River Site*, Risk Analysis, Vol.19, No. 3, 1999. The Department has not adequately analyzed the risks associated with shipping liquid highly radioactive materials, as required by the National Environmental Policy Act ("NEPA"). Instead, the Department relies on prior analyses of the risks of shipping radioactive materials in *solid* form. The Department should not proceed with any shipments until it has done a thorough analysis of the risks of shipping liquid highly enriched uranium.

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NEPA requires federal agencies to prepare and consider an environmental impact statement (“EIS”) before taking a major federal action. 42 U.S.C. § 4332(2)(C). An agency is released from that requirement only if it makes “a finding of no significant impact” based on a preliminary “environmental assessment.” See 40 C.F.R. § 1508.9(a)(1). If an agency has already prepared an EIS regarding a proposed action, the EIS is required to be supplemented if “the agency makes substantial changes in the proposed action” or “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(c).

The Department did not prepare an EIS regarding the proposed transport of liquid radioactive materials from Chalk River to South Carolina. Instead, in April 2013, the Department announced that it would not prepare a supplemental or new EIS because it had determined in a Supplemental Analysis in March 2013 “that the potential environmental impacts would not significantly differ from results presented” in prior EIS’s prepared by the Department. 78 Fed. Reg. 20625, 20627 (April 5, 2013). However, as the Department acknowledged in that Supplemental Analysis (p. 2), it had originally proposed that highly enriched uranium be transported in solid form. Significantly, all of the prior EIS’s relied upon by the Department assessed risks associated with the transportation of solid materials. In particular neither the Supplemental Analysis nor the prior EIS’s analyzed potential releases of liquid highly enriched uranium to surface waters or groundwater.

To my knowledge, liquid highly enriched uranium has never before been transported by truck. As now proposed, the transport will require multiple shipments of over one thousand miles each, apparently through New York and passing over the Great Lakes and its tributaries, the largest freshwater system in the world. Because liquids and solids are fundamentally different states of matter, the potential release and spread of highly radioactive liquid materials during these shipments presents the potential for environmental harms that are materially distinct from those posed by solid radioactive material.

Indeed, a previous Department of Energy study referenced in the March 2013 Supplemental Analysis recognized the undesirability of transporting liquid highly radioactive materials. The study noted that “[t]o preclude the necessity for transporting liquid high-level wastes, these wastes would be processed on the sites where they were generated.” *Proposed Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Nuclear Fuel Final Environment Impact Statement*, DOE/EIS-0218, 1996, p. 2-18. Moreover, in characterizing the risks associated with transporting spent nuclear fuel, the fact that the radioactive materials considered were in a solid matrix was cited in the Department’s study as an important factor decreasing the chance of release during an accident. “For most accidents, essentially none of the radioactive materials would be released *because it is an integral part of the solid fuel.*” *Id.*, p. 4-4 (emphasis added). That does not hold true for liquid materials.

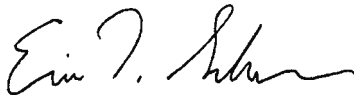
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For these reasons, the Department's decision that it does not have to prepare a new or supplemental EIS violates NEPA and is of serious concern to my office. I would like to request that, before highly enriched uranium in liquid form is shipped through New York or across waterways that flow into New York, the Department undertake a full, detailed analysis that discusses any significant environmental effects of those shipments and reasonable alternatives and measures that would avoid or minimize adverse impacts. As required by NEPA, that analysis should be subject to public notice and comment, providing New York an opportunity to review the analysis and provide input on the risks to our citizens and environment.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric T. Schneiderman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Eric T. Schneiderman