



June 10, 2016

Mr. Andrew Griffith
Associate Deputy Assistant Secretary for Fuel Cycle Technologies
U.S. Department of Energy
Office of Nuclear Energy
1000 Independence Ave SW
Washington, DC 20585

RE: DOE's Consent Based Siting Process; Response to IPC (Invitation for Public Comment)

Dear Mr. Griffith,

Jones River Watershed Association (JRWA; see end of letter for point of contact, address, phone number and email as requested by DOE) offers the following comments concerning the above referenced IPC.

JRWA has been working since 2006 on matters related to Entergy's Pilgrim Nuclear Power Station, located on Cape Cod Bay in Plymouth, Massachusetts. Our mission is to protect, enhance, and restore the quality of the natural resources in Southeastern Mass., in particular the Jones River and Cape Cod Bay. Forty-three years of nuclear waste is currently being stored at Pilgrim either in an overcrowded wet pool or in storage casks located precariously close to the shoreline (i.e., in reach of rising tides, coastal storms, and saltwater degradation). This default situation risks contamination of the regional environment and is a primary concern. Pilgrim is shutting down in 2019 and additional casks are planned for this coastal location. While we work to see that this waste is stored in a more secure location within the site, we believe no near-by location is safe. We are therefore interested in efforts related to the eventual transport of Pilgrim's waste offsite, and the consent-based siting process for nuclear waste storage and disposal facilities across the country. It is in this context that JRWA offers the following comments.

Our comments primarily address question #5 in the IPC (other important issues to be considered by DOE).

Solve the Problem, Don't Bury It

According to the Administration's 2013 Strategy for the Management and Disposal of Used Nuclear Fuel and High-level Radioactive Waste, making progress on waste disposal will support the sustainment of nuclear as an energy source in the U.S. JRWA strongly believes that nuclear power generation should cease until the problem of nuclear waste existence and storage management is solved. Merely "burying" the waste does not solve the problem. The main goal should be solving the problem of the existence of nuclear waste, not create a storage solution that will be used as an excuse to generate more waste.

Substantial time, money, and intellectual resources should be focused on developing and bolstering nuclear waste transmutation and other innovative technologies that seek to recycle and reuse waste, reduce radioactivity, and minimize waste volume. Only when solutions arise for dealing with the existence of nuclear waste should investment in continuing nuclear power production resume with any justification.

Production of Waste Has Not Been for Our Benefit

DOE stated at a recent Consent-Based Siting meeting in Boston that nuclear waste has been produced for our benefit. JRWA disagrees and argues that nuclear waste has been produced primarily for the benefit of those who profit from the industry. More than a half-century of objections by the general public demonstrate this. A benefit to the public over the past several decades would have been the development of truly clean, renewable energy sources, timely retirement of old reactors and safe disposal methodologies. However, subsidies provided to the nuclear energy industry successfully crushed incentives for these other energy sources to flourish and real solutions to emerge.

Nuclear is Not Carbon Free

If DOE wants to build trust among the public, then ending the greenwashing of nuclear power should be a priority. Nuclear power is not carbon free -- no form of energy production is. Considering the life-cycle of nuclear power production, there are emissions associated with uranium mining/processing, construction of plants and decommissioning processes, and general daily plant operations. While nuclear can be considered, at best, a low-carbon form of energy production, there are other serious health and safety problems such as water pollution, massive water usage and destruction of aquatic life, and especially the production of eons-lasting, highly toxic nuclear waste that currently has no safe disposal plan or repository despite many decades of planning and effort. Our nuclear policy is self-defeating.

Options Other than Burial

DOE has alluded that developing a deep geological repository is the only safe and fallback option to handle nuclear wastes. However, the potential for bioremediation of nuclear waste by, for example, *Kineococcus radiotolerans*, nuclear waste transmutation, and other innovative technologies should be explored. The government should be dedicating substantial resources into research and intellectual development to truly solve the problem. With the proper resources and allowing science – rather than politics – lead the charge, we are optimistic solutions can be achieved.

Building Trust May Not Be Possible; A New Entity is Needed

Similar to the Nuclear Regulatory Commission, DOE – whether real or perceived – is viewed as a promoter of nuclear industry. The process for developing plans for storing nuclear waste properly and safely should be led by a new, independent entity. This entity should be well-funded, free-thinking, and intellectually-based to allow for optimal progress. It should be guided by strict ethical behavior and free from political animus.

The National Environmental Policy Act

For communities to provide consent, they must be knowledgeable of potential environmental impacts. DOE should ensure siting of nuclear waste (including both storage and transportation) is a thorough process that gives proper consideration of the environmental impacts by complying with NEPA.

Communities' Network

There is need for enhanced communication between all communities that host commercial nuclear reactors (and future storage site host communities) as well as with DOE host communities via a Community Network or Advisory Group. DOE should provide facilitation and guidance to support enhanced communication among these communities. Those participating in such a network should not be advocates for the nuclear industry and should be authorized to participate on behalf of a community (i.e., members elected by fellow community members). There also needs to be longevity built into the process since it is such a long-term issue. Members should have direct access to any and all government agencies dealing with the issues of nuclear waste storage, such as DOE, NRC, etc. Funding is needed for local communities to develop these networks, so that they are better equipped to deal with the issues and develop timely solutions in the face of consistent failure of government and industry to do so.

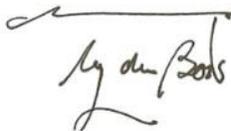
Regional Sites & Infrastructure Improvements

At the very least, interim storage sites should be regional to reduce the length of transportation and the inherent risk associated with transporting nuclear waste. Regional interim storage sites should also have feasible transport routes. For Pilgrim, DOE had planned to ship nuclear waste to Yucca Mountain via 24 barge shipments across Cape Cod Bay, Massachusetts Bay, and Boston Harbor into the City of Boston, where it would then be loaded onto rail cars heading to Nevada.¹ This is not a realistic transport solution. Perhaps regional storage locations would offer more practicable options for transport, avoid shuttling the entire burden elsewhere, and encourage society to really deal with its energy choices.

Once regional interim sites and feasible transportation routes are identified, DOE should be prepared to make infrastructure improvements throughout all routes/states leading to those sites (e.g., rail and roads). In addition to increasing safety, this would provide some incentive for those states and communities through which nuclear waste would be transported. Once these steps are complete, and innovative technologies are being vigorously pursued, then a centralized repository may be more feasible.

Thank you for considering our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Pine duBois". The signature is written in a cursive style with a horizontal line above the name.

Pine duBois
Executive Director
Jones River Watershed Association
55 Landing Road, Kingston, MA 02364
781-585-2322
pine@jonesriver.org

¹ U.S. DOE. 2002. FEIS for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada. (See FEIS Volume II, Appendix J, Transportation).