

# *Nuclear Watch of New Mexico*

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**Nuclear Watch of New Mexico** (NWNM) respectfully submits these scoping questions and comments to the U.S. Department of Energy Office of Nuclear Energy, Science and Technology on the Proposed Consolidation of Nuclear Operations Related to the Production of Radioisotope Power Systems. NWNM is a public interest nonprofit organization with specific interests in virtually all issues pertaining to the Los Alamos National Laboratory and generally for the nuclear weapons complex as well.

## **Scoping Questions**

Will Pu-238 still be used at the Los Alamos National Laboratory (LANL) for national security and/or other purposes? If so, what are those purposes, both national security and “other”?

Should the RPS mission be transferred from LANL, what missions are to be performed at the floor space that’s freed up at LANL’s Technical Area-55?

One reason stated that this consolidation is needed is to locate the missions in a single, highly secure DOE site. Aren’t all DOE sites highly secure? Is there a problem with security at the existing sites? Please explain.

A reason stated that this consolidation is needed is to reduce the shipping of nuclear materials between states. Has shipping been a problem in the past? If so, please document.

What are the construction and annual operating costs for the consolidation facility proposed for INEEL? Will it be fully designed and reviewed prior to construction or will DOE “design build” the facility? If design-build is to be the option, the NNSA should justify that mode of approach, especially in light of the large cost overruns that have occurred for facilities that were planned well in advance.

How can the National Nuclear Security Administration (NNSA) justify that there is not enough Pu-238 already in existence for the national security mission? Please explain and document.

What is the total amount of Russian Pu-238 available for future use by the DOE?

Why produce more Pu-238 if Russia has plenty? Let's at least use the supply we have up, first. Is there another use for Pu-238?

What will Russia think if they send Pu-238 to a Lab that does both national security and space missions?

How much will this consolidation cost versus importing from Russia? The estimated cost for this consolidation is estimated at \$200M to \$230M.

It has been stated that DOE can continue to purchase Pu-238 from Russia, but the political instabilities in the region do not offer this as a reliable long-term option. Why not purchase all the Pu-238 now? It seems a shame not to use existing stockpiles of Pu-238.

What research is planned for more efficient RTGs?

What research is planned for alternative technologies that could possibly eliminate in whole or in part the need for RTGs?

### **Comments –**

We request a 60-day public comment period on the Plutonium Consolidation Draft EIS, and a reasonable time of 30-days between the release of the draft EIS and public hearings.

It seems that a reactor is needed only to make new Pu-238 for the national security mission because Russia appears to have enough Pu-238 for the space mission. One of the Key Drivers is to ensure a continuing supply of Pu-238 for national security mission requirements after the end of this decade. Currently there is a total of 29.9 kg of Pu-238 at INL-Argonne and LANL. Assuming that the 11kg already purchased from Russia was used by NASA, there seems to be enough Pu-238 for the national security needs of 25kg. Please explain why or why not.

Some citizens have questioned why DOE can't discuss the classified national security uses of the radioisotope power systems. Some have inferred from this that the systems will be used in nuclear weapons. Others have noted that Pu-238 has been used in nuclear weapons systems in the past. A confirmation that the Pu-238 used in the national security mission is not used in weapons is needed.

Please describe how the veil of "national security" secrecy will possibly hinder the State of Idaho and citizens of Idaho from monitoring activities, including environmental monitoring, related to the plutonium consolidation project at INEEL.

The EIS needs to fully consider all Defense Nuclear Facilities Safety Board (DNFSB) concerns regarding High Energy Particulate Arrestors (HEPA) filters and active and passive confinement systems. More studies seem warranted on the effectiveness of HEPA filters and the protection of the public. Also, the DNFSB's concerns regarding the design and installation of both active and passive confinement systems in new DOE nuclear facilities should be addressed.

The DNFSB should be consulted with in this National Environmental Policy Act process as "a cooperating agency" in risk analysis and facility design to mitigate risk.

Describe the risks posed by an accident from a seismic event at or near INEEL.

Describe the risks posed by an accident or by a terrorist event at or near INEEL. Describe in detail (including the use of GIS mapping) the areas that could be affected by a plutonium airborne release due to accident or terrorist attack and the amounts of Pu-238 potentially released. New DOE requirements require sites to analyze "Design Basis Threat(s)" for their facility(ies). Please incorporate DBT analysis into this NEPA process. If not incorporate in whole or in part, please fully justify.

Please describe in detail the design features of the proposed consolidation facility intended to prevent and extinguish fires, including how these systems will operate successfully while not deteriorating or otherwise adversely affecting ventilation systems used to contain plutonium and other contaminants.

Please describe in detail the lightning protection system and the back-up power generating system and how these systems will operate successfully while protecting the ventilation systems used to contain plutonium and other contaminants.

Los Alamos' TA-55 facility has had several worker contamination incidents involving plutonium-238, including incidents in 2003, 2001, 2000 and previously (see, e.g., DOE/IG-0591 March 2003). The contaminated room at TA-55 is still not cleaned up nearly 18 months after the last accident. Mechanisms for immediate cleanup should be put in place before any production. Emergency cleanup activities should be included in the scope of the EIS. DOE should evaluate any facility-specific worker safety impacts for the various sites, particularly for plutonium-238 purification and encapsulation activities, and whether new facilities or facility upgrades at the various sites can reduce worker risks.

Related to the above, to what extent is this proposed consolidation of RPS/RTG activities prompted by LANL's and the University of California's poor safety record in activities involving Pu-238?

Describe how the DOE will prepare local and state emergency responders to handle a plutonium accident that results in an off-site release.

Describe how the DOE will train on-site emergency responders to handle fires inside the plutonium consolidation facility so that HEPA filter integrity is maintained.

Describe all types and amounts of waste that will be generated in all aspects of the consolidation proposal on a yearly basis, including waste treatment options and final disposition of each waste type.

Describe the amount of water required on a yearly basis to support plutonium consolidation at INEEL, including how this water will be contaminated, treated, and finally disposed of.

Respectfully submitted,  
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Nuclear Watch of New Mexico