



Citizens Advisory Board
Idaho National Engineering and Environmental Laboratory

**TRANSFER OF HEAT SOURCE/RADIOISOTOPE
THERMOELECTRIC GENERATOR ASSEMBLY AND TEST
OPERATIONS ENVIRONMENTAL IMPACT STATEMENT**

INTRODUCTION

The Idaho National Engineering and Environmental Laboratory (INEEL) Citizens Advisory Board (CAB) submits the following comments during the scoping period for the Transfer of Heat Source/Radioisotope Thermoelectric Generator Assembly and Test Operations (RTG) Environmental Impact Statement (EIS).

RECOMMENDATION

- 1. The INEEL CAB recommends that the U.S. Department of Energy reconsider its decision to separate the RTG EIS from the EIS addressing production of plutonium-238.**

The INEEL CAB questions the rationale for separating the “Proposed Production of Plutonium-238 for Use in Advanced Radioisotope Power Systems for Future Space Missions (Pu-238) Environmental Impact Statement” (Pu-238 EIS) from the RTG EIS. The materials provided during the scoping periods for the two EISs do not provide a clear statement of the U.S. Department of Energy’s (DOE) rationale for separating the apparently related decisions.

The decision to separate the two EISs imposes an additional burden on stakeholders. DOE expects interested parties to prepare two separate sets of scoping comments for submittal during overlapping scoping periods and attend two separate scoping meetings within a very short time frame.

Separating the two EISs also imposes an extra burden on the DOE budget—at the taxpayers’ expense—as the approach requires two complete sets of documentation and two full teams of people involved in collecting data, analyzing the data, evaluating alternatives, and writing.

Consideration of the two sets of decisions in isolation disallows reasonable comparisons of the process as it is presently configured with other configuration options that might be more efficient, effective, or cost-effective with lower overall impacts on the environment. We also feel the “big picture” is lost by separating these two decisions. One result of such a fragmented approach to decision making is that DOE may require duplicated storage capacity at the sites involved as well as excessive transportation of interim products around the country. Further, it makes consideration of an optimal configuration for the entire process close to impossible.

Most importantly, we wonder if the decision to separate the two doesn’t jeopardize DOE’s compliance with the National Environmental Policy Act (NEPA) for “segmentation” as the actions that will be supported by the documentation are inextricably linked. If challenged in court, DOE will have to demonstrate why separation of the two documents does not constitute segmentation.

The INEEL CAB recommends that the DOE reconsider its decision to separate the two documents. If the Department continues to pursue its current approach, both EISs must offer a clear and sound rationale for the decision that can withstand public scrutiny.

2. The INEEL CAB recommends that DOE consider privatizing the assembly of RTG units.

The assembly of the RTG units appears to be a process that is ripe for privatization. The process is discrete, well understood, and involves no new technology. It would not risk national security as it involves non-weapons grade plutonium. The National Aeronautics and Space Administration is the sole purchaser of the product and has need for the product until at least 2010. Additional private customers may be identified in the future as well. All of these characteristics lead us to conclude that the assembly step is appropriate for privatization.

If DOE is convinced that privatization is not feasible, the EIS should present DOE's basis for that determination.

3. The INEEL CAB recommends that the DOE consider adding Los Alamos National Laboratory to the list of alternatives being considered for the RTG assembly.

It could make sense to assemble RTG units at the same location where the previous step in the overall process occurs. Removing the need to transport the encapsulated plutonium between two different facilities would obviously reduce the environmental consequences of the entire process. We recommend the addition of Los Alamos National Laboratory (LANL) as an alternative. If DOE has a sound rationale for not considering LANL, that rationale should be presented in the EIS under discussion of alternatives ruled out from further analysis.

4. The INEEL CAB recommends that the RTG EIS provide sound estimates of the quantity of waste and hazardous materials to be produced and address all impacts of waste and hazardous materials management, including disposal.

The "Notice of Intent" for the RTG EIS provided no estimate of the quantity and/or type of waste and hazardous materials that would result. Further, the "Notice of Intent" included a preliminary listing of impacts that DOE plans to evaluate in its analysis of the alternatives. The list does not include the impacts of disposal, however. Based on DOE's difficulty in opening disposal sites, we questioned the apparent oversight. The RTG EIS must fully disclose all impacts from disposal of all waste and hazardous materials that will result from implementation of the proposed action.

5. The INEEL CAB recommends that the EIS provide an enhanced analysis of the duration of the future need for RTG units and use that time frame to support the analysis of impacts under the various alternatives.

We are puzzled by the apparent discrepancy between the projected time frame for RTG assembly and that for the production of plutonium for use in advanced radioisotope power systems.

DOE should explain the basis for the time frame to be analyzed in the RTG EIS and evaluate the impacts accordingly under all of the alternatives.

6. The INEEL CAB recommends that the EIS provide bounding estimates of the size, number, and frequency of expected shipments of encapsulated plutonium-238 coming into Idaho and the size, number, and frequency of expected shipments of RTG assemblies leaving Idaho on an annual basis in order to fully assess the storage and transportation impacts.

Transportation and interim storage are some of the concerns held by stakeholders regarding DOE's proposed action. The RTG EIS must therefore include bounding estimates of the size, frequency, and number of expected shipments of encapsulated plutonium-238 into Idaho and the size, frequency, and number of expected shipments of RTG assemblies leaving Idaho on an annual basis. Those estimates will allow sound estimates of the duration of time that INEEL would store the encapsulated plutonium-238 before assembly as well as the duration of time that the RTG assemblies would be stored before shipment. Expected schedules will be needed to accurately assess the adequacy of, and all impacts related to, storage.

7. The INEEL CAB recommends that the EIS evaluate the storage requirements for RTG assemblies.

As we understand it, NASA currently has no storage capacity for the RTG units until such time as agency personnel are ready to install the units in spacecraft. The EIS needs to evaluate alternative storage options, including storage at both assembly and installation sites.

8. The INEEL CAB recommends that DOE extend the scoping period to coincide with the scoping period for the Pu-238 EIS.