IEER reacts to Blue Ribbon Commission's final Report to the Secretary of Energy

PRESS RELEASE

RADIOACTIVE WASTES FROM NUCLEAR BOMB PROGRAM GIVEN SHORT SHRIFT IN BLUE RIBBON COMMISSION REPORT

COMMISSION RECOGNIZES FRENCH STYLE REPROCESSING WILL INCREASE PROLIFERATION RISKS WITHOUT SOLVING WASTE PROBLEM

PROGRESS ON CONSENT-BASED APPROACH TO GEOLOGIC REPOSITORY SITING

Takoma Park, Maryland, January 27, 2012 — Arjun Makhijani, Ph.D., President of the Institute for Energy and Environmental Research, today commented on some of the recommendations of the <u>final</u> report of the <u>Presidential Blue Ribbon Commission</u> (BRC) on America's Nuclear Future. The commission was created to address U.S. nuclear waste issues after the Obama administration cancelled the Yucca Mountain program.

On wastes from the nuclear bomb program:

Makhijani: "It is tragic that the Commission did not substantively address the most pressing radioactive waste contamination threats to precious water resources – for instance hundreds of times the drinking water limit at Hanford, Washington on the banks of the Columbia River. The Commission had a charter to conduct a 'comprehensive' review of the nuclear waste problem, including defense wastes from the nuclear bomb program. Yet, it simply said it did not have the resources to deal with all the problems and punted the nuclear weapons waste issue to Congress while focusing on commercial spent fuel at nuclear reactor sites."

"I am even more dismayed that the Commission suggested that Congress consider the possibility of leaving the defense waste disposal in the purview of the Department of Energy (DOE). The Commission has entirely ignored the immense evidence that DOE's plans for disposal of several types of defense waste pose much greater threats to water resources, most especially at Hanford, than from even Yucca Mountain, a poor repository site."

On reprocessing and breeder reactors:

The commission acknowledges in its report that:

"...no currently available or reasonably foreseeable reactor and fuel cycle technology developments—including advances in reprocess and recycle technologies—have the potential to fundamentally alter the waste management challenge this nation confronts over at least the next several decades, if not longer." (p. 100)

Makhijani: "The Commission did reject some reprocessing advocates' claims by recognizing that it will

page 1 / 3

not eliminate the need for a repository and that no form of reprocessing is economical today. But it left the door open for reprocessing existing spent fuel at some future date. Reprocessing spent fuel from existing reactors will multiply risks and costs. There is simply no economic or technical case for that, and the Commission was provided with ample evidence to that effect. Even if the chosen path is breeder reactors, it would be technically better and economically far superior to use the half million tons of depleted uranium that already exist, enough to fuel a U.S. reactor fleet at the present size for 5,000 years. The Commission unfortunately chose to ignore these facts."

"To its credit the Commission did recognize that reprocessing is not an answer to the waste management problem (as indicated by quote above) and that use of plutonium fuel creates an 'increased proliferation risk' (p. 105) both as currently practiced in France and as it might in the future be practiced with breeder reactors."

"Despite having been presented with ample evidence of the failure of the sodium-cooled fast neutron reactor program – \$100 billion has been spent worldwide on the technology and yet it is nowhere near commercial – the BRC is suggesting more of the same. This is unwarranted when there are so many renewable energy options that are far closer to reality and far safer."

On spent fuel storage:

Makhijani: "The Commission used the Fukushima tragedy to punt on the question of hardened dry rather than wet storage of spent fuel at reactor sites. The National Academies had already concluded well before Fukushima that dry storage was safer; Fukushima has only made the risks of wet storage clearer. Nothing we learn from it will indicate that wet storage is safer than dry storage. Yet, the Commission, citing lessons yet to be learned from Fukushima called for yet another study instead of hardened on-site dry storage that has been urged by dozens of organizations."

"IEER calls on the Administration and Congress to mandate that all spent fuel aged more than five years be moved to hardened dry storage on site, and the remaining spent fuel kept in low-density storage in reactor pools. Nuclear Waste Fund monies should be used for on-site hardened dry storage."

On siting:

Makhijani: "The Commission made real progress in pointing out that the top-down approach by which Congress simply mandated characterization of a single site – Yucca Mountain, Nevada – had failed. It recommended a "consent-based" process that would give some regulatory muscle to state, local, and tribal governments. This is a far better approach, even if it is likely to be slower at the start, as the Commission pointed out. Yet the consent-based process must be preceded by a prolonged scientific effort before siting begins."

Makhijani: "The site is only one of three elements in geologic isolation – the others are engineered barriers and repository sealing approaches. The three elements must work together. There should be at least ten years of research on this problem before site selection begins. Without that the risk of environmental injustice, in a consent-based process is substantial."

Makhijani: "I am dismayed that the Commission saw fit to recommend that DOE have a large upfront

role in both the next steps for repository program, "including R&D on geological media" (p. 118) and for the Interim Storage site before a new organization is put in place to take over the responsibility. DOE was in large part responsible for the mess the program is in now, which began well before Congress cut off the process in 1987, pointing to Yucca Mountain alone. On the one hand the Commission has cautioned against haste; on the other hand, it has encouraged haste in a really ill-advised way by recommending a continuing DOE role in critical activities better left to an independent agency."

About IEER

The Institute for Energy and Environmental Research provides policy-makers, journalists, and the public with understandable and accurate scientific and technical information on energy and environmental issues. IEER's aim is to bring scientific excellence to public policy issues in order to promote the democratization of science and a safer, healthier environment.

-30-

Published on 2012-01-27 Last modified on 2012-05-29