



Media Release

For Immediate Release – March 18, 2009

Contact: Karen Hadden, SEED Coalition, 512-797-8481

Dr. Arjun Makhijani, IEER, 301-270-5500

NUCLEAR REGULATORY COMMISSION IGNORES DEPLETED URANIUM RISKS; VOTES TO IGNORE SOUND SCIENCE, ITS OWN PRIOR ANALYSIS, AND RADIOLOGICAL SAFETY

Decision is a bow to burgeoning nuclear fuel enrichment industry

Austin, Tx – The Nuclear Regulatory Commission (NRC) voted 3-1 today to declare that depleted uranium (DU) from enrichment plants is a “Class A low-level radioactive waste” – the least dangerous kind that supposedly consists mainly of short-lived radionuclides. In 2005, the NRC had concluded that large amounts of DU were not covered by its existing low-level waste rule and directed its staff to develop recommendations regarding DU classification.

The Commission’s action also opens the door to classification of other dangerous radioactive wastes in the least hazardous category – Class A.

“The NRC today bypassed scientific integrity, its own prior analysis in a draft low-level waste environmental impact statement, and the simple facts about the characteristics of depleted uranium,” said Dr. Arjun Makhijani, president of the Institute for Energy and Environmental Research (IEER), who has studied the issue of depleted uranium disposal and testified in NRC enrichment plant licensing proceedings. “The NRC has been too eager to please the burgeoning uranium enrichment industry by compromising sound science and health protection of future generation in order to ensure low disposal costs.” Dr. Makhijani noted that NRC ignored recent research, much of it done at the Armed Forces Radiobiology Research Institute, indicating that uranium, including depleted uranium, behaves both as a toxic heavy metal and a radioactive material, with the two properties reinforcing each other.

“DU appears to be like radioactive lead. Its disposal needs to be carefully regulated. Deep geologic disposal in an engineered repository appears to be the only option that may meet present radiation protection standards,” said Dr. Makhijani. “The Commission has done a real disservice. President Obama has said his administration would respect good science. With the exception of the courageous vote of Commissioner Jaczko, who voted for a process that would respect the scientific and regulatory process, the NRC majority flouted that promise.”

Extensive analyses done by IEER have shown that DU disposal in large amounts in shallow facilities would greatly exceed the dose limits of current NRC low-level waste regulations. The analysis done by the NRC itself in the draft Environmental Impact Statement for low-level waste regulation concluded that DU concentrations suitable for Class A classification should not exceed 50 nanocuries per gram. DU has a concentration about eight times higher.

Dr. Makhijani said that the NRC staff's October 2008 finding that doses from DU disposal could be low in arid climates is unsupportable and based on false assumptions, such as that there would be no erosion from wind, rain, flowing water, or snow for one million years at the disposal site. Another weak assumption was that affected people would remember where the disposal took place and know not to go onto the site for a million years.

"Perhaps NRC staffers should visit the Grand Canyon if they don't understand the effects of wind, flowing water, rain and snow in the desert," said Karen Hadden, Executive Director of the Sustainable Energy and Economic Development (SEED) Coalition. "Dangerous depleted uranium could end up being dumped on Texas, New Mexico and Utah, threatening the lives and health of people in these regions."

According to the World Health Organization human exposure to depleted uranium can occur by inhalation, ingestion and dermal contact, including injury by embedded fragments. DU has both chemical and radiological toxicity, and targets the kidneys and lungs. Lung cancer can result if radiation dose is high over a prolonged period. The organization warns that "in some instances the levels of contamination in food and ground water could rise after some years and should be monitored and appropriate measures taken where there is a reasonable possibility of significant quantities of depleted uranium entering the food chain."
(http://www.who.int/ionizing_radiation/pub_meet/en/DU_Eng.pdf)

Currently some 740,000 tons of depleted uranium in unstable hexafluoride form are stockpiled at Department of Energy sites at Paducah, Kentucky, Portsmouth, Ohio, and Oak Ridge, Tennessee. One company, LES, is currently building an enrichment plant in New Mexico, which will generate well over 100,000 metric tons of DU. The NRC granted a license to that company in 2006. Three other companies are seeking licenses to build enrichment plants in Idaho, Ohio, and North Carolina. **The NRC staff assumes that between existing stocks and new DU, 1.4 million tons will have to be disposed of in all.**

Dr. Makhijani added that the NRC staff was delinquent in doing its due diligence when it supported the granting of the license to LES in 2006. It did so stating that a 1990 technical analysis done for the EnergySolutions low-level waste disposal site in Utah was scientifically sound. That analysis concluded that an amount of uranium-238 that was greater than the weight of the Earth could be disposed of in less than an ounce of Utah soil. The staff did not back away from this conclusion even when the absurdity of the conclusion was pointed out in expert testimony.

"Science and public health have succumbed to expediency and profit," concluded Dr. Makhijani. "It is a sad day, with Commissioner Jaczko's no vote being the only bright spot. We call on President Obama to call a halt to this process and instead set in motion a rulemaking and Environmental Impact process that respects science and the National Environmental Policy Act."

The EnergySolutions low-level waste disposal site in Utah is most likely to benefit economically from today's NRC ruling, since it is licensed to dispose of Class A low level waste only. The newly licensed low-level waste disposal site in West Texas may also benefit, although the license is now being appealed.

###