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News Release

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

DECISION AN APPARENT BOW TO BURGEONING NUCLEAR FUEL ENRICHMENT INDUSTRY

TAKOMA PARK, MD, MARCH 18, 2009 – The Nuclear Regulatory Commission (NRC) voted 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. Commissioner Jaczko dissented and voted in favor of a rulemaking process to determine the classification of DU within the existing low-level waste framework.

"With the exception of Commissioner Jaczko's vote, 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. "This will make DU disposal cheap for the enrichment companies. The NRC seems eager to please the burgeoning uranium enrichment industry, but it has compromised sound science and public health protection of future generations."

"The Commission has done a real disservice to the public with this decision," said Dr. Makhijani. "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 processes, the NRC majority flouted that commitment."

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 (see, for instance,

http://www.ieer.org/reports/du/lesrpt.pdf
). The 1981 analysis done by the NRC itself in the Draft
Environmental Impact Statement for the low-level waste regulation concluded that DU in Class A waste
should not exceed 0.05 microcuries per cubic centimeter. DU from enrichment plants has a concentration that
is over ten times greater than that. The final rule dropped DU in large amounts from consideration because it
was not considered a waste at that time.

Dr. Makhijani said that the NRC staff's October 2008 finding that doses from DU disposal could result in low doses in arid climates is based on unsupportable assumptions. For instance, the analysis assumes that will be no erosion from wind, rain, flowing water, or snow for one million years at the disposal site. Another implicit assumption was that affected people would remember where the disposal took place and know not to go onto the site for a million years because the dose is calculated only for people outside the disposal area.

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 for the enrichment plant 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 DU from new plants, 1.4 million tons in all, will have to be disposed of as a radioactive waste. The radioactivity of DU grows with time because of the in-growth of the decay products of uranium-238, like thorium-230 and radium-226.

Dr. Makhijani added that the NRC staff did not do its homework regarding DU disposal impacts prior to granting a license to LES in 2006. Its counsel stated that it relied on a 1990 technical analysis done for the EnergySolutions low-level waste disposal site in Utah as being sound. Among other things, that analysis included a conclusion that an amount of uranium-238 greater that the weight of the Earth could be disposed of in fraction of an ounce of Utah soil. The staff did not back away from its reliance on the report even when the physical impossibility of the conclusion was pointed out in expert testimony by Dr. Makhijani (transcript available).

"It is a sad day because science and public health have succumbed to expediency and profit," concluded Dr. Makhijani. "Commissioner Jaczko's vote for a regulatory process to determine the classification of DU and update the low-level waste rule, using the proper legal, technical and public processes, is the only bright spot. We applaud him. We call on President Obama to support Commissioner Jaczko's vote and call a halt to the process that has classified a dangerous, long-lived radioactive waste in the least dangerous Class A category. He should ask the NRC to set in motion process that will respect science and protect public health."

EnergySolutions, which has a low-level waste disposal site in Utah, is most likely to gain an advantage from today's NRC ruling, since it is licensed to dispose of Class A low-level waste only. A newly licensed low-level waste disposal site in West Texas may also benefit.