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DOE Plutonium Fuel Contract Award Inappropriate and Premature

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For more information contact: Arjun Makhijani or Anita Seth tel. 301-270-5500 PRESS RELEASE

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Critical Technical, Financial, Public Process, and Environmental Issues Neglected, Independent Institute Charges French Company's Home-Country Record Should be **Made Public**

Takoma Park, Maryland: The US Department of Energy (DOE) has awarded an industry consortium a \$130 million "cost-plus-fixed-fee" contract to begin the first phase of its program to use surplus weapons-grade plutonium mixed with uranium (MOX fuel) in commercial nuclear reactors. MOX made from weapons-grade plutonium has never been used as a commercial reactor fuel, according to the Institute for Energy and Environmental Research (IEER). The industry consortium consists of Duke Engineering & Services, COGEMA Inc., and Stone & Webster. Major subcontractors will include the Duke Power Company and Virginia Power Company, whose reactors are proposed for MOX fuel use, Nuclear Fuel Services, Inc. in Erwin, Tennessee, and a Belgian company, Belgonucleaire.

"The DOE is proceeding hastily and without due caution in a matter that has serious implications for security, public safety, and the environment," charged Dr. Arjun Makhijani, President of IEER. "This is unfortunately all too typical of the DOE. Inappropriate haste has been a prime cause of technical failures in major DOE programs in the past."

The consortium of companies includes the French-government-owned corporation, COGEMA Inc. The DOE has cited the French company's MOX expertise as a basis for its choice. However, the DOE has not made a serious evaluation of COGEMA's record regarding worker radiation exposures, releases to the environment, safety record, or other health or environmental matters, despite requests that it do so. Moreover, COGEMA's record on MOX is based on reactor-grade plutonium, which contains much less pluontium-239 than weapons-grade plutonium (usually about 60 percent or less compared to about 94 percent, respectively).

COGEMA has polluted the environment in its operations at the La Hague plutonium processing facility. Its operations are the subject of protest not only by environmentalists but also by other governments of the European Union, which have also criticized similar discharges by British Nuclear Fuels Limited. That British company is to assume part-ownership of Westinghouse, the main contractor for the Savannah River Site, where the MOX fuel would be fabricated.



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"It is highly inappropriate that DOE is relying on COGEMA's home-country record for its nuclear expertise on MOX as one of the factors in its contract, but not making public the related environmental, safety and health record," said Dr. Makhijani.

The public information policies of COGEMA also came in for criticism. Complete data on health and environmental issues are unavailable to the public, since French freedom of information laws are very weak relative to those in the United States. There is no detailed public information even on some matters of the greatest seriousness. For instance, there is no public report on the April 1980 incident at La Hague, when there was total loss of electrical power to its high-level waste tanks. If spare generators had not been found in nearby towns soon enough, the tanks might have dried out, possibly resulting in a chemical explosion and a vast release of radioactivity over large areas of France and other European countries. Yet there is still no detailed public report of this incident.

The DOE has also failed more directly to meet the spirit if not the letter of its public process obligations, according to IEER. The documents submitted to the DOE by the bidding consortia were kept secret, and only a summary of environmental impacts will be published in the Final Programmatic Environmental Impact Statement (PEIS). No reactor-specific information was provided in the Draft PEIS. Furthermore, communities living around the Catawba, McGuire, and North Anna nuclear power plants, which have been chosen for MOX irradiation, have not had a chance to make comments: the DOE failed to hold public hearings in these communities, despite requests that it do so.

The contract announcement is also made inappropriate by the fact that the DOE has not yet released a Record of Decision affirming that it will pursue its preferred "dual-track option" for plutonium disposition. "This process is backwards," said Anita Seth, IEER's global outreach coordinator. "The DOE is making a mockery of the NEPA process by awarding a contract before it has issued a Record of Decision (ROD). MOX is an undesirable option, but if the DOE is going to proceed, it should not do so before demonstrating some prudence and a sound public information process."

According to IEER, the following steps should be undertaken before letting COGEMA proceed with a MOX contract:

- the DOE should hold hearings in the areas of the Southeast that will be affected by a MOX program and in Washington, DC on all relevant issues, including the home-country records of COGEMA.
- the DOE should examine in detail the home-country records of all members or subcontractors of the consortium before it completes the Final PEIS and issues the ROD.

The DOE's haste in granting a contract is unwarranted given that the US has not yet completed an agreement on principles for plutonium disposition with Russia, a prerequisite to beginning facility construction. Parallel progress in Russia has been cited by Congress as a necessary condition for the release of major funding for a disposition program. Uncertainties about financing, technical obstacles posed by the limited number and the age of reactors in Russia, and continuing disagreements over the use of the MOX program for the future commercialization of plutonium have plagued US-Russian discussions. Regulation and safety issues surrounding the use of MOX in Russian light water reactors are as yet unresolved, as is the question of who would bear liability for an accident in Russia, should one occur as a result of a US-sponsored program.



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"Security of plutonium from diversion or theft is the primary goal of a disposition program. This is particularly important in Russia, where economic and political instability are increasing threats. The US government should be focussing on developing sound disposition options with Russia, rather than hurrying down a MOX path," said Dr. Makhijani.

IEER is a non-profit organization in Takoma Park, Maryland that provides the public and policy-makers with clear, thoughtful studies on a variety of energy and environmental issues.

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