

REQUEST FOR INFORMATION AND EXPRESSIONS OF INTEREST

Next Generation Nuclear Plant

SUMMARY

The Department of Energy (DOE) is supporting the research, development, and design work for a Generation IV nuclear power plant that represents a significant advance over existing energy production technologies in terms of sustainability, safety and reliability, economics, proliferation resistance and physical protection. The Department is working with its international partners in the Generation IV International Forum to identify research and development activities that could enable such a technology to be demonstrated in pilot form before 2020. The base technology concept, the Next Generation Nuclear Plant (NGNP), is an advanced, next-generation nuclear reactor coupled to advanced electricity and hydrogen generation technologies.

The Department has developed a draft strategy, which is intended to stimulate private sector advice and information in advance of the Department's determination of mission need and funding availability for this effort. This approach is intended to elicit information to support the Department's future critical decisions in accordance with DOE program and project management directives.

With this notice, the Department is soliciting comments from all interested parties including, in particular, those who have the capability and experience necessary to integrate activities associated with the research, development, design, construction, licensing, and operation of advanced technology nuclear facilities. In particular, the Department seeks private sector comments regarding the strategy outlined in this notice, including comments on the structure and financing of the project and its management.

The strategy, outlined in this notice, is designed to maximize U.S. private sector and international (*e.g.*, agents of countries that are members of the Generation IV International Forum) cost-shared participation in this effort, while also integrating the research work conducted at the Department's lead laboratory for nuclear energy technology development, the Idaho National Laboratory (INL). One management and funding option that the Department would like discussed is the feasibility and effectiveness of entering into a cost-shared, cooperative agreement with a U.S. company (the "Project Integrator") to lead the formation of an international consortium for this project and execute the activities associated with this project. As noted in the Department's May 2004 final Request for Proposals for the management and operation of the INL, DOE has not made a final decision to construct a pilot NGNP facility. Should such a decision be made, final site selection will be subject to compliance with NEPA, other applicable laws and regulations, and the Department's project approval critical decision process. In all events, the Department intends that the INL would play a central role throughout the NGNP effort.

Comments on this strategy should be received by DOE by July 2, 2004.