DOE Nuclear Safety Research and Development Program

PRESENTED AT THE NATIONAL ORGANIZATION OF TEST, TRAINING AND RESEARCH REACTORS 2013 ANNUAL CONFERENCE

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Presentation Overview



- Nuclear Safety Research and Development (NSR&D) History
- NSR&D Program Goals
- NSR&D Program Operating Plan
- Current Program Activities
- Near-Term Objectives
- Anticipated Program Activities
- Funding NSR&D
- Conclusion
- Contact Information



NSR&D History



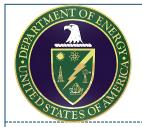
- Defense Nuclear Facilities Safety Board Recommendation 2004-1: "[E]nsure continued integration and support of research, analysis, and testing in nuclear safety technologies."
- 2004 Implementation Plan included commitments to develop a plan to
 - Identify NSR&D needs and assess if they are met
 - Ensure NSR&D needs are budgeted and share results
- 2006 Updated plan assigned NNSA as the responsible organization
- 2011 Responsibility transferred to Office of Health, Safety and Security (HSS) under the Office of Nuclear Safety, to develop corporate NSR&D Program covering both civilian and defense nuclear facilities



NSR&D Program Goals



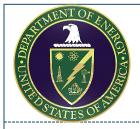
- A focused, DOE-wide corporate effort on NSR&D
- Coordination across the complex of the NSR&D efforts (completed, ongoing, and proposed)
- Comprehensive determination and prioritization of needs and assessment of research results
- A vehicle to disseminate NSR&D results and information



NSR&D Program Operating Plan



- The NSR&D Program is managed by the Office of Nuclear Safety, HSS
 - Process developed for identification and prioritization of NSR&D needs, activities, and results
 - NSR&D website and database to disseminate results and inform the NSR&D community of NSR&D activities
- NSR&D Committee chartered by HSS, with representation from all DOE program offices responsible for nuclear facilities, to coordinate activities across the complex
- DOE's Nuclear Safety Council provides guidance to the NSR&D Program, Committee, and activities
- Office of Nuclear Safety projects support policy, directives, and technical standards development
 - > ONS projects do not replace program office-funded NSR&D projects



Current Program Activities



- NSR&D webpage established under ONS webpage
- Plan for NSR&D database to collect and disseminate results, reports, and program contacts under development
- First call for proposals for NSR&D projects distributed in 2013
 - > Three projects selected for support
 - Current projects involve non-reactor safety issues, but future projects may also consider issues relevant to DOE reactor facilities





- Implement the NSR&D Program Operating Plan
- Initiate the development of the NSR&D database
- First Annual Report on NSR&D activities across DOE/NNSA

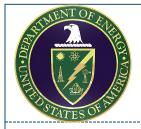


Anticipated Program Activities

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- Annual proposal solicitation and project selection
- NSR&D Annual Report
- Annual briefing to the DNFSB
- NSR&D Conference for communication and integration of projects
- Enhance methods for identifying and prioritizing NSR&D needs
- Expand outreach, networking, and information exchange on NSR&D with national and international organizations



Funding NSR&D



- Funding for national laboratory-based NSR&D should utilize program and laboratory-directed R&D support before seeking NSR&D Program funds
- NSR&D Program-funded projects should have cross-cutting benefit to multiple program offices, potential for cost savings, and advance the fundamental understanding of nuclear safety science and technology
- Proposals must have endorsement from appropriate site and program offices



Conclusion

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- The Office of Nuclear Safety looks forward to expanding both the number and scope of DOE NSR&D projects in coming years
- Contacts with organizations such as TRTR will enhance the Office of Nuclear Safety's ability to identify nuclear safety issues and support appropriate R&D to address those issues



Contact Information

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