



Briefing on Office of Nuclear Regulatory Research

Performance and Plans

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Agenda

- **Overview**
- **Programs Supported**
- **Other Work**
- **Codes**
- **Management**
- **Summary**

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Overview

- **Technically Diverse**
- **Support Commission, Executive Director for Operations (EDO), Office of Nuclear Reactor Regulation (NRR), Office of Nuclear Material Safety and Safeguards (NMSS), and Office of Nuclear Security and Incident Response (NSIR)**
- **Extensive Collaboration**
- **Human Capital**

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Major NRR Support Activities

- **New Reactors**
- **Rulemaking – Technical Bases**
- **Fuel Performance**
- **Steam Generator Action Plan**
- **Probabilistic Risk Analysis and Standardized Plant Analysis Risk (SPAR) Model**
- **Grid Reliability**

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Major NRR Support Activities, cont.

- **Operating Experience and Accident Sequence Precursor (ASP)**
- **Davis-Besse Lessons Learned**
- **Regulatory Guide Revision**
- **Human Factors**
- **Computer Codes**
- **Licensing Support**

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Major NMSS Support Activities

- **Decommissioning**
- **Dry Cask Storage Probabilistic Risk Assessment (PRA)**
- **Cask Burnup Credit**
- **Criticality Support**

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Major NMSS Support Activities, cont.

- **Licensing Support**
- **Regulatory Guide Revision**
- **Rulemaking – Technical Bases**
- **Package Performance Study**

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Major NSIR Support

- **Security and Emergency Preparedness**
- **Incident Response**
- **Commission Has Been Briefed**

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Other RES Assignments

- **Abnormal Occurrence Report**
- **Generic Safety Issues**
- **Standards Executive**
- **Committee to Review Generic Requirements (CRGR)**
- **Radiation Exposure Information and Reporting System**
- **Risk Communication**

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Computer Codes

- **Thermal-Hydraulic – Code Assessment and Maintenance Program (CAMP)**
- **Severe Accident – Cooperative Severe Accident Research Program (CSARP)**
- **Cooperative PRA (COOPRA) Program**
- **Fuel Performance**
- **Fire Modeling**

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Computer Codes, cont.

- **Environmental**
- **Computational Fluid Dynamics (CFD)**
- **Finite Element Analysis**
- **Spreadsheets and Mathematical Codes**
- **Criticality**
- **Widely Distributed**

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International Activities

- **Support Office of International Programs (OIP)**
- **Code Support**
- **Availability of Facilities**
- **Effectiveness and Efficiency**

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Management Accomplishments

- **Improved Communications**
- **Significantly Revised Operating Plan**
- **Integrated with Supported Offices in Budget and Work Processes**
- **Revising Office Procedures**

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Challenges and Response

- **Information Sources**
- **Business Processes**
- **Timeliness**
- **Realism**
- **Human Capital**

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Human Capital

- **Management Succession**
- **Staff Succession**
- **Knowledge Management**

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Knowledge Management

- **Not Information Technology (IT)**
- **Extension of Existing Knowledge Acquisition, Learning, Training, and Educational Activities**
- **Systematic Analysis of Knowledge Needs**
- **Use IT as Needed**

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Summary

- **Strengthening Agency Integration**
- **Quality Work**
- **Human Capital**