

Decommissioning Planning



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Regulatory Milestones

- 1988 Funding assurance requirements
- 1997 License Termination Rule
- 2002 SECY-01-0194
- 2008 Proposed Decommissioning Planning Rule
- 2009 SECY-09-0042
- 2011 Final Rule: Decommissioning Planning



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Decommissioning Planning

- **Goal: Prevent creation of legacy sites**
- **License termination**
 - Funding
 - Surveys
 - Dose projections
- **Record keeping**
- **Minimize contamination during operation**
 - Subsurface surveys and monitoring
- **Prompt remediation during operation**



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Industry Actions

- **Lessons Learned from Decommissioning**
 - Workshops 1997 forward
 - Operating experience reports
- **Ground Water Protection**
 - Workshops since 2006
 - Industry initiatives and guidance
- **Enhanced monitoring and inspection program to protect environmental resources**
 - Industry Initiatives and guidance



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Industry Efforts – Nuclear Energy Institute

- **Groundwater Protection Initiative**
- **NEI 07-07 Ground Water Protection Initiative – Final Guidance Document**
- **NEI 08-08 Generic FSAR Template Guidance for Life Cycle Minimization of Contamination**
- **NEI 09-14 Rev 1 Underground Piping and Tanks Integrity Initiative**
 - Includes the Buried Piping Integrity Initiative
- **NEI 11-07 Coordination of Enhanced Inspection and Environmental Monitoring Initiatives**



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Industry Efforts – Electric Power Research Institute (1 of 2)

- **Decommissioning**
 - ~20+ reports and guidance documents
 - “Groundwater Monitoring Guidance for Nuclear Power Plants” September 2005
 - “Characterization of Dose Modeling of Soil, Sediment and Bedrock during Nuclear Power Plant Decommissioning” November 2009
- **Ground water protection**
 - ~12+ reports and guidance documents
 - “Groundwater Protection Guidelines for Nuclear Power Plants” August 2007
 - “Review of Methods and Tools for Estimating Atmospheric Deposition of Tritium at Nuclear Power Plants” December 2009



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Industry Efforts – Electric Power Research Institute (2 of 2)

- **Ground water protection** (continued)
 - “Groundwater and Soil Remediation Guidelines for Nuclear Power Plants December 2010
 - “Advanced Technologies for Groundwater Protection” November 2011
- **Component integrity**
 - ~12+ reports and guidance documents
 - “Inspection Methodologies for Buried Pipes and Tanks” August 2010
 - “Recommendations for an Effective Program to Control the Degradation of Buried and Underground Piping and Tanks” December 2010



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Decommissioning Planning Rule

- **Final rule published June 17, 2011**
 - Effective December 17, 2012
 - Reporting requirements under 10 CFR 50.82(a)(8)(v) and (vii) effective March 31, 2013
 - Revised draft regulatory guidance for surveys and monitoring published December 13, 2011



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Decommissioning Planning During Operations DG-4014

- **Improved draft regulatory guidance**
 - Significant stakeholder interaction
- **Concerns**
 - *De facto* codification of industry initiatives
 - “Significant” residual radioactivity
- **Agree that a workshop is needed**
- **Recommend extending effective date to 18 months after guidance is finalized**



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Prompt Remediation

- **Request for comment on 7/18/2011**
 - Solicit input on potential rulemaking that would explicitly require prompt remediation of residual radioactivity during operations
- **NRC held a webinar on 7/25/2011**
- **Comments submitted 9/16/2011**
 - Existing regulations are protective
 - Threshold options are inappropriate
- **Encourage NRC to continue stakeholder dialogue and hold workshop(s) before acting**

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Decommissioning Planning

- **Reinforce the benefits of a rulemaking process that actively solicits and incorporates input from stakeholders**
 - Clearer understanding by licensees of staff expectations
 - Improved ability to implement acceptable methods to comply with regulations
- **Ultimately, improving protection of the environment is the right thing to do**

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