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John Hickman

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John B. Hickman

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(301) 415-3017

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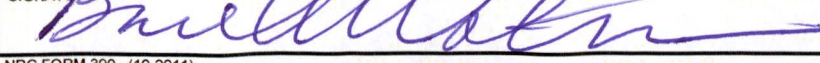
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Reactor Decommissioning Rulemaking - Path to Regulatory Efficiency

Used Fuel Management Conference May 2016

John Hickman, NRC
Reactor Decommissioning Branch

Office of Nuclear Material Safety and
Safeguards

Decommissioning Transition Process

- Some of the regulations that apply to operating reactors continue to apply to decommissioning reactors
- The number of potential accidents scenarios and risks of radiological releases are reduced compared to an operating reactor
- Licensees request certain amendments and exemptions that reflect this reduction in risk
- Long term regulatory framework for the facility is established, based on reduced risks posed by the facility
- Transition process ends with transfer of regulatory responsibility from operating reactor program to nuclear materials program

Recent Decommissioning Plants



- Recent Unplanned Reactor Unit Shutdowns
 - **Crystal River Unit 3** (February 2013)
 - **Kewaunee Power Station** (May 2013)
 - **San Onofre Nuclear Generating Station, Units 2 & 3** (June 2013)
 - **Vermont Yankee Nuclear Power Station** (December 2014)

- Future Planned Reactor Unit Shutdowns
 - **James A. FitzPatrick Nuclear Power Plant**
(Announced Shutdown for January 2017)
 - **Pilgrim Nuclear Power Station**
(Announced Shutdown by June 2019)
 - **Oyster Creek Nuclear Generating Station**
(Announced Shutdown for Late 2019)

Licensing Action Requests During Transition to Decommissioning



- Typical Exemption Requests
 - Emergency Preparedness
 - Security
 - Decommissioning Trust Fund
 - Liability and Property Insurance
- Typical Amendment Requests
 - Staffing, Training, and Qualifications
 - Defueled Emergency Plan
 - License Conditions
 - Defueled Technical Specifications
- Other Licensing Actions
 - Order Rescissions
 - Security Plan 50.54(p) Reviews
 - Post-Shutdown Decommissioning Activities Report Meeting and Review

Decommissioning Transition Challenges

- NRC and Licensee Learning Curve
 - 15-year interval since prior decommissioning
 - Limited guidance in processing decommissioning transition licensing actions
- Licensing Impacts from the Five Premature Reactor Unit Shutdowns
 - Minimal pre-planning of licensing reviews
 - Over 70 decommissioning-related licensing actions
 - Concurrent licensing action submittals and competing priorities for expedited reviews

Lessons Learned

- Licensees should engage NRC staff as early as possible after announcing intent to cease operations
 - Coordinate licensing action submittals and schedules
 - Pre-submittal meetings
- Licensees should submit decommissioning licensing actions well ahead of permanent cessation of operation - to the extent possible
- Licensees should use established precedent, when appropriate
- Public and intergovernmental meetings and outreach
 - Communicate with public, state and local community stakeholders on issues important to the community
 - A local community advisory panel can be very helpful
- NRC staff long-term solution is rulemaking

Path Forward

- Continue to use current transition process with implementation of lessons learned until decommissioning rulemaking is implemented
- Proceed with decommissioning rulemaking activities, as directed by the Commission
 - Will reduce the need for exemptions from existing regulations
 - Will reduce the need for amendments to existing license
 - Supports the principles of good regulation, including openness, clarity, and reliability

Commission Direction

SRM SECY-14-0118



- Graded approach to emergency preparedness
- Lessons learned from previous and current decommissioning
- NRC approval of Post-Shutdown Decommissioning Activity Report
- Maintaining three existing decommissioning options and associated timeframes
- Role of State and local governments and non-governmental stakeholders
- Other issues deemed relevant by staff

Pursuing Rule Completion



- Advance Notice of Proposed Rulemaking
 - Published November 2015
- Draft Regulatory Basis
 - November 2016
- Final Regulatory Basis
 - June 2017
- Proposed Rule/Draft Regulatory Guidance
 - April 2018
- Final Rule/Final Regulatory Guidance
 - Provide to the Commission in calendar year 2019

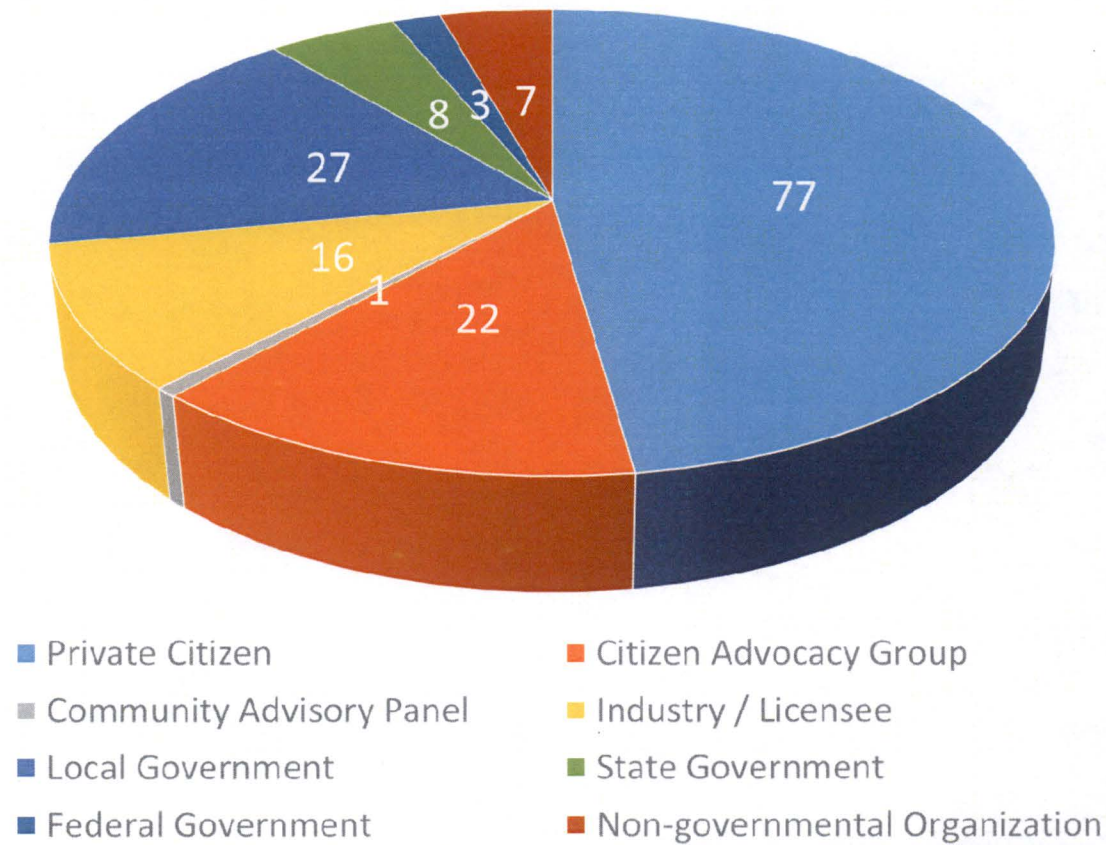
March 15th Commission Briefing



- History and Rulemaking Status
- Presenters: Industry, Public and States
- Diversity of Comments
- Diversity of Opinions on Regulations
- Bifurcation or Comprehensive Rulemaking
- Roles of the States
- Community Involvement

Comment Sources

Distribution of Public Comments by Source



Representative Comments



- Against relaxation of requirements with fuel still in the pool / transfer fuel to ISFSI ASAP
- Increase involvement of State and local governments and public groups / require CAP
- Against SAFSTOR / 60 years too long
- NRC should approve PSDAR / reinstate DP
- Increase decommissioning funding oversight
- Supportive with specific suggestions