Nuclear Energy Industry Perspective on Decommissioning

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Focus on Transition Issues

- Regulatory framework has proven effective in assuring protection of health and safety throughout decommissioning
- Regulatory framework for transition from operation into decommissioning is ad hoc
 - requires site-specific exemptions
- Substantial industry and regulatory experience to address transition issues on a risk-informed basis



Priorities

- 1. Short-Term: Engage stakeholders on developing an enhanced process for timely and efficient decision-making on shut down plant transition issues
- 2. Mid-Term: Endorse interim industry guidance to address transition issues
- 3. Long-Term: Promulgate integrated, riskinformed rulemaking for nuclear power plant decommissioning



Shutdown Plant Transition

- The risk related to emergency or security events is reduced for permanently shutdown and defueled nuclear power plants
- Risk-informed exemptions are currently necessary to transition from plant shutdown into decommissioning
- Previous and current experience support riskinformed improvements to the transitionrelated regulatory processes



Interim Guidance

- Decommissioning transition issues are being addressed on a licensee-specific basis
- Corresponding industry and agency functional groups are interacting on the generic regulatory and technical aspects of the issues
- NEI plans to develop and submit industry guidance for NRC endorsement to serve until rulemaking is accomplished



Integrated Rulemaking

- SECY-00-0145 integrated rulemaking plan largely addresses the issues currently under consideration
- SRM returned the paper to staff without vote pending further developments:
 - "The staff should submit the revised paper to the Commission."
- Further developments have not substantially changed the scope and merits of the integrated rulemaking recommended by the staff



In Conclusion

- While the past experience base is large, the future need is much larger:
 - 11 power reactor licenses terminated
 - 17 in DECON or SAFSTOR
 - 100+ in operation or being licensed
- The opportunities for near and long-term improvements are timely and readily available
- Future rulemakings affecting nuclear power reactors should also consider decommissioning on a risk-informed basis



Backup Slides



References

- COMSECY-96-068, "Strategic Assessment Issue Paper: Decommissioning – Power Reactors (DSI 24)" and associated Staff Requirements Memorandum (SRM)
- SECY-98-075, "DSI-24 Implementation: Risk-Informed, Performance-Based Concepts Applied to Decommissioning," and associated SRM
- SECY-98-258, "DSI-24 Implementation: Innovative Regulatory Approaches and Risk-Informed, Performance-Based Concepts Applied to Decommissioning" and associated SRM
- SECY-00-0145 "Integrated Rulemaking Plan for Nuclear Power Plant Decommissioning" and associated SRM



COMSECY-96-068 Staff Requirements Memorandum

"The Commission supports achieving finality in decommissioning requirements as soon as practicable. As the industry moves to a deregulated environment, decommissioning implementation costs must be understood and properly factored into planning decisions and/or rate recovery mechanisms. To this end, the Commission approves Option 2, pursue current direction and approaches more aggressively, for Decommissioning - Power Reactors (DSI 24) as the Final Commission View..."



SECY-98-075 Staff Requirements Memorandum

"The Commission did not object to the staff's proposal to maintain the decommissioning inspection program in the regions and to maintain an on-going dialogue with the **Nuclear Energy Institute and other stakeholders** regarding innovative approaches to decommissioning. However, with respect to rulemaking and guidance development, the Commission believes that the schedule proposed in SECY-98-075 reflects insufficient priority attention to the agency's decommissioning program in general and to processing licensing actions, including exemptions, for those licensees in active decommissioning in particular."



SECY-98-258 Staff Requirements Memorandum

"The Commission expressed concern over the timeliness of addressing decommissioning licensing actions. The Commission also considered the issue of how quickly to reduce various requirements at a permanently shutdown plant to be central to various rulemakings planned or underway."

"While the staff met its timeliness goals, the Commission encouraged the staff to continue its efforts to improve the timeliness of decommissioning licensing actions and rulemaking initiatives. While it is imperative that staff ensure that an acceptable level of safety is maintained at decommissioning facilities, licensing actions and rulemaking initiatives which reduce unnecessary regulatory burden should continue to receive high priority."



SECY-00-0145

"The attached rulemaking plan would amend regulations in the areas of EP, insurance, safeguards, staffing and training, and backfit for licensees who certified, pursuant to 10 CFR 50.82(a), that they have permanently ceased facility operation(s) and have permanently removed fuel from the reactor vessel."

