



U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

NRC Actions on Ground-Water Contamination

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March 14, 2007

Regulatory Information Conference



NRC Actions

- ❑ Issued Info Notice 2004-05 Salem SFP & Ground Water
- ❑ Issued Info Notice 2006-013 Ground Water Contamination
- ❑ Revised Inspection Procedure 71122.01
- ❑ Completed Lessons Learned Task Force study and assigned actions to NRC program offices
- ❑ Reviewed Implementation of NEI Industry Initiative
- ❑ Evaluating a revision to the Significance Determination Process for Inspection Findings



Information Notice 2006-13

- Issued IN 2006-13
- Notice discusses events at:
 - Braidwood
 - Byron
 - Dresden
 - Haddam Neck
 - Indian Point



Information Notice 2006-13

- ❑ System or component degradation may have already occurred
- ❑ Slow leaks are not easily detectable
- ❑ Ground water sampling and analysis may be only means to detect
- ❑ Detection by REMP may be after the fact



Revised NRC Base-line Inspection Module 71122.01

- Inspect knowledge of underground piping location and materials
- Evaluate potential leakage as result of degradation
- Appraise ability to monitor for leaks



Notifications to other governmental agencies

- 50.72(b)(2)(xi) reporting requirements
- NUREG-1022 – Event Reporting Guidelines



Evaluating A Revision to Public Radiation Safety SDP

- Commission directed an SDP re-evaluation:
 - Ensure consistency with ROP goals
 - Use risk-informed approach
 - Update SDP to NRC goal of “openness”

- Evaluation due to Commission in April



LLTF Conclusions

- ❑ No public health impact, but public concern significant
- ❑ Many SSCs are commercial grade, and are not under maintenance and surveillance programs
- ❑ Many leaks were not visible, low leakage rates may not be readily detected



LLTF Conclusions (cont.)

- ❑ Transport of groundwater is complex, hydrology studies may be minimal and out-dated
- ❑ All decommissioned plants have had some leakage to ground water
- ❑ Ground-water contamination can significantly impact decommissioning costs



Future Actions

- Implement 26 LLTF Recommendations
 - NRC working group to evaluate how to best implement LLTF recommendations
 - Possibly update regulatory guides:
 - RG 1.21, Measuring, Evaluating and Reporting Effluents
 - RG Guide 4.1, Environmental Monitoring
 - Possibly begin rule-making



Temporary Instruction (TI)

- Purpose - inspect implementation of the NEI / industry action plan
- Inspection criteria will be based on NEI GPI guidance
- Begin July 2007 , complete in 2 years
- Inspect in parallel with baseline inspection



Long Term Plans

- Based on lessons learned from the TI, future events, and LLTF recommendations, continue evaluating and revising:
 - baseline inspection program
 - SDP