Potential Policy Issues for Discussion at October 4, 2010,
Public Meeting on Groundwater Protection

Theme 1: Reassess NRC's Regulatory Framework for Groundwater Protection

Should NRC's programs be modified to ensure harmonization of the approaches we have taken to groundwater protection that are applied to different licensees under NRC regulations? (C.3.2)

How should the NRC's programs accommodate or encourage industry initiatives that go beyond NRC requirements?

- E.g., for reactors, is the industry's voluntary initiative on groundwater protection sufficiently comprehensive? Should it be taken into account in NRC's regulatory framework? (B.3.4)

How should NRC's programs address protection of the environment?

- Should requirements be promulgated to require prompt remediation of unintended releases of radioactive liquids? (C.3.3)
- Should the NRC consider modifying Part 20 to address those portions of International Commission on Radiological Protection (ICRP) 103 related to environmental protection? (E.3.4)

Should changes be made to the radiological effluent performance indicator in the Reactor Oversight Process to make it more reflective of performance in the area of plant releases, both planned and unplanned? Should the performance indicator take into account public confidence in addition to the current risk-informed approach to radiation protection that verifies the effluent release program performance? (B.3.1)

Should a policy statement be developed based upon NRC's existing regulations and guidance to address: (1) protection of the environment within NRC's regulatory framework, (2) NRC's expectations of licensees, (3) the relationship to other regulatory schemes, and (4) NRC's desire to work cooperatively with other Federal agencies and States in protecting the environment?

Should NRC's regulatory framework be informed by experience or guidance developed or applied by the International Atomic Energy Agency, the international community or by other U.S. agencies, e.g., Department of Energy directives (DOE STD 1153) and activities?

Theme 2: Maintain Barriers as Designed to Confine Licensed Material

Should NRC's programs be modified to ensure that systems and components better contain radioactive liquids and gases?

- Are additional requirements appropriate for the design, operation and maintenance of systems and components that contain radioactive liquids and gases? (C.3.1)
- Should a more quantitative definition of the "As Low As Reasonably Achievable" (ALARA) concept be adopted with respect to leakage of radioactive liquids and gases?

- Is it feasible to apply the ALARA concept in 10 CFR 50.36a to "unmonitored releases" and to restricted areas as well as unrestricted areas?
- How could the principles in 10 CFR 20.1406 be applied to operating reactors?
- Do the existing General Design Criteria (GDC) (e.g., GDC 60 and 64) in 10 CFR Part 50, Appendix A, provide a basis to require new licensee programs with respect to leakage of radioactive liquids and gases?

Theme 3: Create More Reliable NRC Response

Should NRC's programs be modified to ensure greater consistency when addressing low risk, high public interest/confidence issues?

- Should NRC's oversight programs be modified to include more specific guidance on responding to reported incidents where risk is low but there is high stakeholder interest? Should this guidance address the follow up and disposition of a licensee's immediate actions, extent of condition, root cause, corrective action, and communication with the stakeholders? (A.3.1, A.3.2, B.3.3)

How can the NRC improve communications and support to other regulatory agencies, such as the U.S. Environmental Protection Agency and the States, in understanding and exercising respective roles and responsibilities related to groundwater protection? (D.3.3)

Theme 4: Strengthen Trust

How can the NRC increase confidence in its actions and communications related to groundwater protection?

What role could third party verification or assessment play in responding to groundwater protection? (D.3.3)

What would be the benefit of using the International Nuclear Event Scale for communicating the safety significance of events at Levels 0 or 1 that attract high domestic or international public interest? Would this approach lead to confusion on the significance of the issue?

How can greater clarity be given to the interplay between NRC regulations and existing State and other Federal regulations with respect to the objectives and level of protection provided by adherence to the regulations?