# NRC Commission Meeting Groundwater Task Force

Patrick Mulligan, Manager
Conference of Radiation Control Program Directors
and
NJ DEP Bureau of Nuclear Engineering

# Theme 1: Regulatory Framework

"The SMRG concurred with the GTF's conclusion that the NRC is accomplishing its stated mission of protecting public health, safety, and protection of the environment through its response to groundwater leaks/spills, consistent with its regulatory framework."

#### Issues

- NRC release standards are dose based and directly related to public health and safety.
- GWTF document states that regulation based on environmental protection is not within the NRC's statutory authority.
- EPA water quality standards are based on "environmental protection"
- NRC should not pre-empt any actions taken by states that are based on environmental regulation (state or federal) regarding groundwater or drinking water

#### Theme 2: Maintain Barriers

- NRC needs to take a more pro-active role in the inspection of systems to ensure integrity is maintained and licensed material is controlled in accordance with the design.
- Employ more stringent requirements for all underground piping carrying licensed materials.
- Verify modification records and proper application of coatings through inspection process.
- Explore feasibility for moving pipes above ground or into vaults to prevent possibility of future occurrences

#### Additional Measures

- Consider making the Voluntary Industry Initiative on Groundwater Protection more than just voluntary.
  - Regulatory
  - Memorandum of Agreement
  - Environmental Surveillance Program

### Theme 3: Improve NRC Response

- Improve the Reactor Oversight Process to make Performance Indicators more meaningful.
- Evaluate reporting requirements for loss of control of licensed material so that events are identified timely, investigated thoroughly and actions taken to mitigate future occurrences.

#### Theme 3: Improve NRC Response

- Consider making hydrogeologic study part of environmental impact statement.
  - Fully understand the flow of groundwater at the site prior to releases to groundwater.
  - Quickly assess the potential impact to local drinking water supplies
- Natural attenuation constitutes an uncontrolled, unmonitored release of licensed material to the environment
  - Consider immediate remediation rather than at decommissioning

# THEME 4: Strengthen Trust

- All leaks of licensed materials from unplanned, unmonitored pathways should be reported to the NRC and the state upon recognition without regard to magnitude.
- An investigation should start immediately in order to bound the extent and magnitude of the release.
- Make prompt public notification of facts including supporting data.

# THEME 4: Strengthen Trust

- Make the entire process transparent to all stakeholders.
- Make public information available timely (quickly).
- Develop public Outreach programs that can be brought to the local communities in the event of a leak and encourage state and industry participation