Group 3 Recommendation 11.3
Real Time Radiation Monitoring

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New Jersey Assessment

- Current regulation and guidance provides a mechanism for prompt and effective development of Protective Action Recommendations
- Offsite monitoring capabilities are robust and effectively provide technical data to support dose projections and protective action decisions for the public
- Public release of data would not enhance ability to make protective actions but could have beneficial impacts if implemented properly

New Jersey Assessment

- Fixed Monitoring Stations can provide an early warning and detection of releases from a NPP
  - The potential exists for release pathways that are unmonitored that can be effectively detected by fixed monitoring stations
  - The current EAL scheme includes several initiating conditions that are based on offsite radiological exposure (non-plant condition based) where fixed stations may prove useful

NJ Fixed Monitoring Capabilities

- Real time radiation monitoring
  - Fixed radiation monitoring stations: Continuous Radiological Environmental Surveillance Telemetry (CREST)
    - 16 stations around Oyster Creek offsite
    - 10 Stations around Salem/Hope Creek
    - 6 stations onsite (ISFSI)
- Transmitted to DEP network database minute by minute via cellular communications with copper transmission as a backup

CREST Data Resiliency

- Real time radiation data stored within the Garden State Network on a dedicated server
  - Redundant network servers at multiple locations
  - Automatic failover on power outages or system failures
  - Accessible from the DEPs intranet and through the public internet with required credentials
  - Battery back up located at each site to supplement AC power loss

Field Radiation Data Collection

- Four Vehicles equipped with real time radiation detection equipment for:
  - Ambient Gamma Radiation Detection
  - Air Iodine Concentrations
  - Air Particulate Concentrations
- Data transmitted real time via cellular technology to network servers within the Garden State Network
- Plans and procedures to dispatch additional teams to collect data with handheld instruments

Data Sharing

- NJ has been actively involved with the CRCPDs E-43 Committee on Interagency Environmental Data Sharing and Communication
- Assisted with the development of data sharing policy recommendations that were incorporated into the Nuclear-Radiological Incident Annex
- Currently involved with cooperatively developing policies for sharing radiation data with the public

Data Sharing

- Real time fixed monitoring data is shared within the DEP via in house web application developed using ESRI enterprise products
- Project in progress to share ESRI web applications with other state agencies
- Shared with State and Federal partners in real time through the RadResponder Network using the EPAs Exchange Network Protocols.

Data Sharing

- NJ is committed to making all radiation data accessible within the state government
- NJ is committed to using the RadResponder Network as the principal means of sharing radiation data in real time with state and federal partners
- NJ is evaluating policy recommendations for making radiation data publicly available

Public Data Concerns

- Context
  - Radiation data must include information for public to use to properly interpret data without creating panic
- Validation/Verification
  - Date must be vetted by radiation control personnel prior to release for public consumption
- Policy Permissions
  - State must have pre-designated process for reviewing, validating and approving data for public release to facilitate process