

SNC GWPI Implementation

(Existing and New Units)

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Points of Discussion

1. **SNC Objectives**
2. **SNC Implementation Status**
3. **SNC Program Management**
4. **Public Safety and Regulatory Confidence**

Southern Nuclear Objectives

Safe Operation of New and Existing Power Stations

- Mitigating the Risk of groundwater contamination
- Maintaining design margin and condition of SSCs

Minimizing Potential Environmental Impacts

- Monitoring transport of groundwater contamination
- Developing Conceptual Site Hydrology Models

Industry Leading Monitoring Programs

- Groundwater sample and monitoring wells
- Buried Pipe Program implementation

Ongoing Continuous Improvement

- Review and update of monitoring program over time
- Incorporation of industry lessons learned

GWPI Implementation Status

- **NEI 07-07 – Ground Water Protection Initiative**
 - **GWPI Program**
 - Program established and being implemented at all SNC sites
 - Status: Implemented – Further enhancing site risk assessments
 - **Communication**
 - Reporting and emergency communications plans in place
 - Status: Established – Stakeholder, voluntary, 30 day & annual report
 - **Program Oversight**
 - Open communications and disclosure to NRC, NEI, and INPO review
 - Status: Completed - Self-Assessment and required NEI review

BPI Implementation Status

- **NEI 09-14 – Buried Pipe Integrity Initiative**

- Procedures & Oversight Due 6/30/10 – Complete
- System Risk Ranking Due 12/31/10 – Complete
- Inspection Plan Due 6/30/11 – IP (70%)
- Plan Implementation Due 6/30/12 – IP (25%)
- Condition Assessment Due 6/30/12 – IP (10%)
- Asset Management Due 12/31/13 – IP (5%)

GWP/BPI Program Management

- **Processes and Programs**
 - Common processes established for new and existing sites
 - Continuous improvement via assessment & lessons learned
- **Rigorous Challenge and Debate**
 - Technical challenge, monitoring, trending, & data analysis
 - Significant commitment to transparency and public trust
- **New, Existing, and Renewal Licensing Processes**
 - Generic Aging Lessons Learned (GALL) & Decommissioning
 - General Design Criteria vs. PEO vs. § 20.1406 Compliance

GWP/BPI Program Management

- **New Unit Design Considerations**
 - Preferred materials employed where feasible
 - General reduction underground piping by design
 - Engineered backfill with known material properties
 - Coatings improvement in life and protection offered
- **Program Implementation**
 - Existing programs will be modified for new plants
 - Inspections, risk ranking, and monitoring required
 - Significant NRC application and approval processes
 - Extensive environmental studies for license

Public Safety & Regulatory Confidence

- **Aggressive Action – Industry Initiatives**
 - Industry imposed initiatives exceed federal requirements
 - Significant investment to improve inspection technology
 - Industry ahead of aggressive implementation schedule
 - Unanimous Chief Nuclear Officer vote and support
- **NRC Oversight Effectiveness**
 - Highly intrusive NRC monitoring of licensed material
 - Required inspections for safety significant systems
 - Existing federal requirements are being enforced
 - Rigorous licensing and license renewal process