

# Industry's Buried Piping Integrity Initiative

Regulatory Information Conference

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# History

- **Buried piping leaks have occurred at our plants**
  - **Leaks have not raised safety or regulatory compliance concerns or had significant effects on public health and safety**
- **Industry has recognized the importance of buried piping integrity for some time**
  - **INPO focus area since 2007**
  - **NEI Ground Water Protection Initiative approved in 2007**
  - **EPRI buried piping activities emphasized in 2007**
  - **EPRI Buried Piping Integrity Group established in 2008**
    - **Support utility buried piping programs**
    - **Buried Piping Program Guidelines published in Dec 2008**
    - **All utilities are members as of January 2010**

## Perspective

- Leaks from buried piping have the potential to be safety, radiological, environmental and financial concerns
- It is important to address this condition
  - Minimize the possibility of more significant leaks
  - Maintain public confidence

# Initial Industry Activities

- **September meeting to evaluate options**
  - **No significant safety or radiological concerns to-date**
  - **Inspection technology does not support guaranteed detection of degradation**
  - **Ground Water Protection Initiative addresses piping containing radiological material**
    - **Addresses monitoring, remediation , and communication**
  - **Public confidence is important for operation of existing plants and support of new plants**
  - **Important to maintain regulatory confidence**
  - **Recommended an NSIAC Initiative**

# Initial Industry Activities

- **September meeting recommendations**
  - **Adopt an NSIAC Buried Piping Integrity Initiative to address all buried piping**
    - **Procedures and oversight**
    - **Prioritization through risk ranking**
    - **Inspections**
    - **Asset management plan**
  - **Develop an NEI Guideline to supplement existing guidance**
    - **Guide Initiative implementation**
  - **Buried Piping Integrity Initiative supplements the Ground Water Protection Initiative**

## Understanding an NSIAC Initiative

- NSIAC is an NEI standing committee whose members include the Chief Nuclear Officer (CNO) of every utility that operates a nuclear power plant in the US
- Approved Initiatives are formal commitments between CNOs to follow a defined policy or plan of action
  - Initiatives require 80% approval
- The Buried Piping Integrity Initiative was adopted on November 18, 2009

# Buried Piping Integrity Initiative

- **Goal: reasonable assurance of leakage and structural integrity of buried piping with emphasis on piping containing radiological material**
- **Six implementation milestones**
  - 1. Procedures and oversight by 6/30/10**
  - 2. Risk ranking of piping by 12/31/10**
  - 3. Inspection plan by 6/30/11**
  - 4. Start inspections by 6/30/12**
  - 5. Condition assessment of piping containing radioactive material by 6/30/13**
  - 6. Asset management plan by 12/31/13**

# Subsequent Industry Activities

- **Formed Buried Piping Integrity Working Group and Task Force**
- **Issued NEI Guideline (NEI 09-14)**
  - **Text of the Initiative**
  - **Intent of the Initiative**
  - **Roles and responsibilities**
  - **Reporting**
- **Developing guidance on “reasonable assurance”**
- **Continuing engagement with NRC**



# Current Industry Activities

- **Implement the Initiative and monitor progress**
- **Trend leaks from buried piping**
- **Develop inspection technologies**

# Future Industry Activities

- **NEI**
  - Continue NRC engagement
  - Utilize the Buried Piping Integrity Task Force to evaluate Initiative implementation and OE
  - Communicate developments
  - Possibly revise NEI 09-14 to address lessons learned
- **EPRI**
  - Support implementation
  - Develop inspection technology
- **INPO**
  - Continue focus area