NEI - Buried Pipe Integrity Task Force

EPRI Buried Pipe Integrity Group Update

David Smith

Program Manager-Balance of Plant Corrosion

NRC/Industry Meeting on Buried Pipe

October 9th, 2013   White Flint, MD

EPRI Buried Pipe Integrity Group (BPIG)

- Buried Pipe Integrity Group (BPIG) formed in 2008

- Membership
  - All US Nuclear utilities
  - International members from Canada, France, U. K., Brazil, and Korea

- Provides:
  - Forum for plant owners to discuss buried pipe issues and exchange experiences (OE Sharing)
  - Forum to obtain a consensus on industry issues
  - Technical support on buried pipe issues, as well as support for related products including BPWORKS™
  - Related training
  - Interface with Vendor Support

- Sponsor related R&D

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EPRI Buried Pipe Integrity Group (BPIG)

- The industry is actively engaged:
  - Meeting attendance and participation is strong

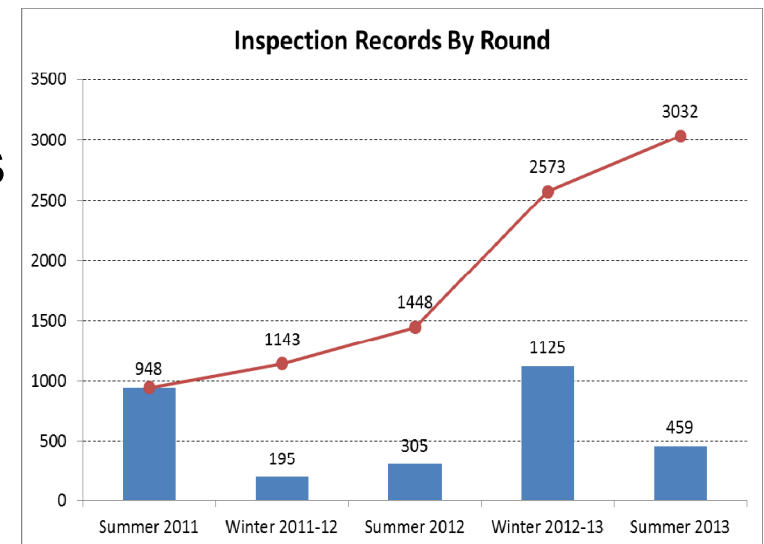|	February	July
2008	86	55
2009	76	70
2010	134	149
2011	174	165
2012	166	131
2013	128	113

  - Discussions have followed the phases of the Initiative
    - Early topics focused on programmatic issues
    - Current topics on implementation and inspection

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EPRI Buried Pipe Integrity Group (BPIG)

- Highlights from the July 2013 Meeting:

  – Utility Round Robin-Attendees discuss issues and successes

  – Utility operating experience presentations focused on inspection

  – NDE Technology Updates for piping and tanks

  – NRC, NEI, INPO, ASME, NACE, and ANI Updates

  – EPRI Project Updates

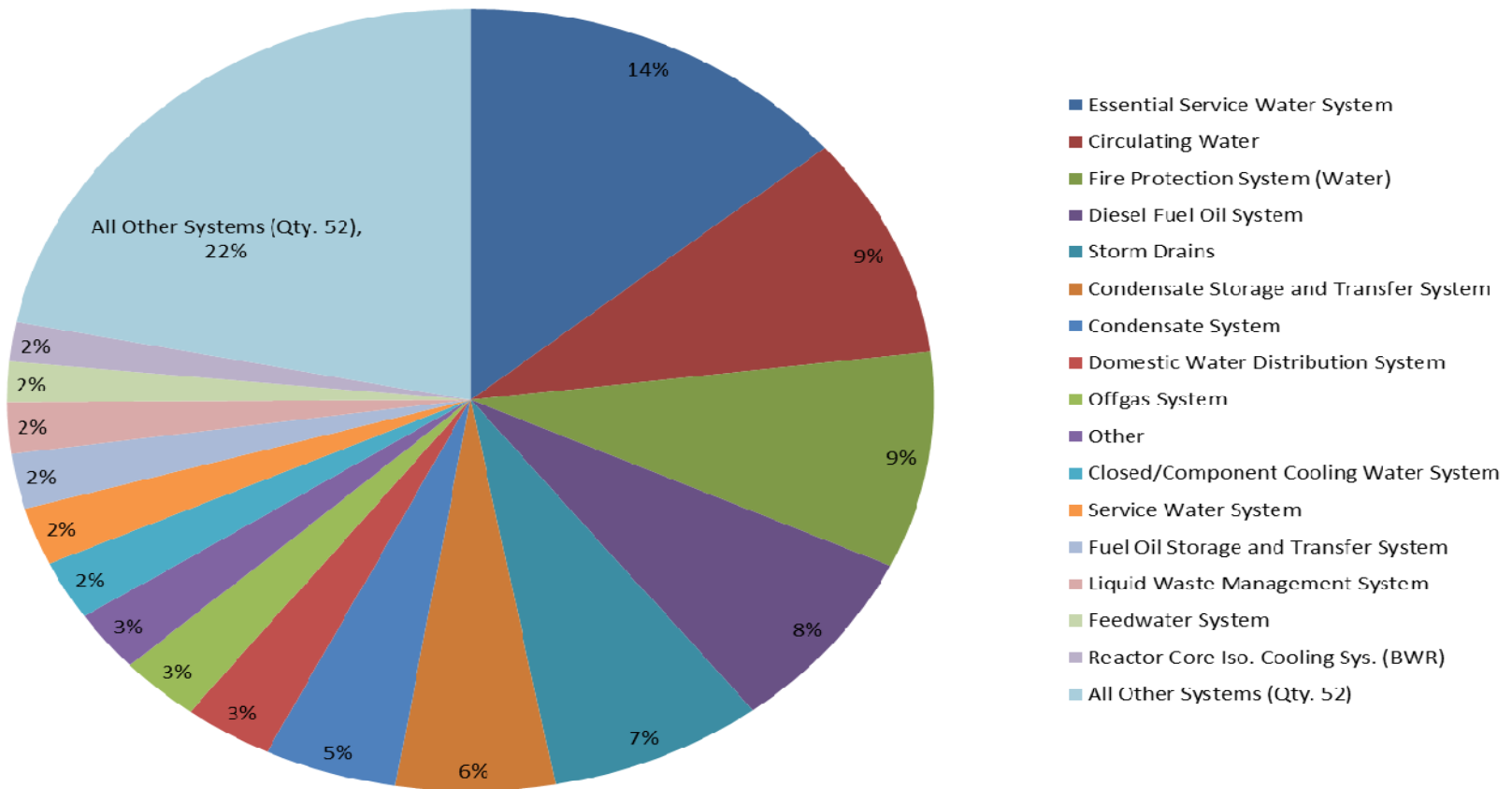EPRI | ELECTRIC POWER RESEARCH INSTITUTE

Buried Pipe Inspection Results Database

- Developed to compile and share inspection results
    - Good data as well as bad data
    - Help determine where to inspect
    - May provide basis for optimized inspections

- NEI 09-14 requirement for reporting results
    - Updates provided at BPIG meetings

- Results to date (Summer 2013)
    - Total of 3032 inspection records
        - 273,824 feet inspected

Inspection Records By Round

Round	Records	Cumulative
Summer 2011	948	948
Winter 2011-12	195	1143
Summer 2012	305	1448
Winter 2012-13	1125	2573
Summer 2013	459	3032

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Inspections by System

Inspection Count % by Generic System

- 14% — Essential Service Water System
- 9% — Circulating Water
- 9% — Fire Protection System (Water)
- 8% — Diesel Fuel Oil System
- 7% — Storm Drains
- 6% — Condensate Storage and Transfer System
- 5% — Condensate System
- 3% — Domestic Water Distribution System
- 3% — Offgas System
- 3% — Other
- 2% — Closed/Component Cooling Water System
- 2% — Service Water System
- 2% — Fuel Oil Storage and Transfer System
- 2% — Liquid Waste Management System
- 2% — Feedwater System
- 2% — Reactor Core Iso. Cooling Sys. (BWR)
- All Other Systems (Qty. 52), 22%

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EPRI's Cathodic Protection User Group (CPUG)

- CPUG was formed in 2011
  - Forum for plant owners to discuss CP issues and exchange experiences (OE Sharing)
  - Obtain a consensus on industry issues
  - Interface with Service Providers
  - Identify needed R&D
- Meets once per year
  - 3 web casts/year (May, Aug, Nov)
  - Planning for 2014 meeting in progress
- New Project
  - Guideline for CP System Self Assessments

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