PUBLIC MEETING BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND INDUSTRY REPRESENTATIVES TO DISCUSS BURIED AND UNDERGROUND PIPING ISSUES

Changes to GALL Report Revision 2, AMP XI.M41, “Buried and Underground Piping and Tanks”

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• Changes to the Generic Aging Lessons Learned (GALL) Report Revision 2 AMP XI.M41, “Buried and Underground Piping and Tanks”
• August 2, 2012
• 77 FR 46127
• ML12138A296
Topics Covered in ISG

• Include inspection recommendations for plants not utilizing a cathodic protection system during the period of extended operation;
• Remove the recommendation to volumetrically inspect underground piping to detect internal corrosion;
• Recommend that further increases in inspection sample size should be based on an analysis of extent of cause and extent of condition when adverse conditions are detected in the initial and subsequent doubled sample size, rather than continuing to double the sample size;
Topics Covered in ISG, cont

• Add a recommendation that, where damage to the coating is significant and the damage was caused by non-conforming backfill, an extent of condition evaluation should be conducted to ensure that the as-left condition of backfill in the vicinity of observed damage will not lead to further degradation;
• Add specific acceptance criteria for cathodic protection surveys;
• Add the specific preventive and mitigative actions utilized by the AMP in the Final Safety Analysis Report (FSAR) Supplement description of the program;
• Correct an internal conflict between AMP XI.M41 and AMP XI.M36, “External Surfaces Monitoring of Mechanical Components.”
Current Actions

• Preparing RAls for all current applicants to ensure consistency with ISG, main issues:
  – 100 mV cathodic protection (CP) criterion in mixed metal environment
  – Number of inspections
  – Availability and effectiveness criteria for CP, 85%/80%
  – 10 year search of OE if CP not provided
Current Actions, cont

• Reviewing an applicant’s proposal to use coupons to verify effectiveness of CP
  – Coupon characteristics
  – Coupon placement
  – Analysis of coupon results
  – Acceptance Criterion
  – Compensatory excavated direct visual inspections of in-scope buried pipe