

EDM OFFERS A VARIETY OF SERVICES DESIGNED TO HELP A UTILITY BETTER MANAGE ITS STEEL ASSETS. THESE SERVICES ENCOMPASS ALL ASPECTS OF CORROSION MANAGEMENT FROM INSPECTION AND ASSESSMENT THROUGH MAINTENANCE AND REPAIR.

GIS Corrosion Mapping provides a valuable visual view of the utility's assets showing different hazard zones. The GIS corrosion map utilizes published soils data to identify corrosion risk.

**Soil investigation** utilizes a variety of field measurements to evaluate the different factors that influence a soil's corrosivity, including:

- Hq
- Redox potential
- Resistivity
- Steel to soil potential
- stivity (half-cell)

**NDE inspection techniques** provide direct indications of the asset's condition, including:

- Visual
- CGWT
- MsS

• UT thickness measurements

**Cathodic Protection (CP)** helps protect buried steel assets against corrosion.

- Design/engineering
- Testing evaluation
- Installation

# **Steel corrosion mitigation & repair** services include:

- Coating evaluation
- Coating specification
- Member repair or replacement design

# EDM INTERNATIONAL, INC.



EDM OFFERS TWO DIRECT-MEASUREMENT, NDE TECHNIQUES THAT HAVE BEEN SPECIFICALLY DESIGNED TO ASSESS THE CONDITION OF ANCHOR RODS, DIRECT EMBEDDED STEEL POLES, AND LATTICED TOWER STUB ANGLES.

Both the Magnetostrictive Sensor (MsS) technique and Cylindrically Guided Wave Technique (CGWT), have been widely used and proven to be cost-effective options for assessing the below-ground condition of these assets. The NDE techniques classify the condition of an asset based on its degree of corrosion (minor, moderate, excessive).

# APPLICABLE ANCHOR RODS

- Rods with either solid or tubular crosssections
- Top sections of multi-piece rods
- Rods in direct soil contact or encased in concrete
- Galvanized rods
- Copper clad rods
- DYWIDAG anchor rods

### APPLICABLE STEEL POLES

- Both circular and multi-sided steel poles (with or without a sacrificial corrosion collar)
- Poles in direct soil contact or encased in foam (no concrete backfill)
- Poles with any type of protective coating

#### APPLICABLE STUB ANGLES

• Bare stub grillage foundation only

Some of EDM's NDE applications utilize technology developed under the sponsorship of EPRI.

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