Substation Services

Equipment, Site, Structure, and Security

Substations and switchyards share critical assets to overall system reliability, however:

- Substation structures typically haven't been addressed in decades
- Many substation structural components are beyond their expected design life and showing signs of deterioration
- Planning outages for equipment and structure replacement can take months and can be costly
- Capital budgets are becoming subject to increased scrutiny
- Structure failures represent substantial risk of loss of life, widespread outages, and financial losses

Field Services

- Structure and foundation assessment
- Corrosion mitigation with groundline coatings
- Structure restoration
- Grounding grid assessment and repair
- Site assessment and debris removal
- Security hardening solutions
- Site and structure mapping and numbering
- Equipment assessment and testing
- Infrared reliability scans
- Aerial assessment including reliability scanning

Substation Security

Reduce the visibility of critical electric equipment and the risk of targeted attacks and blasts.

- Privacy and noise-reduction screens
- Movable ballistic panels
- Permanent structural wall systems

Why Osmose's Substation Services?

- Key resiliency offering
- Cost effective
- Capitalize as part of a program
- Increase reliability and safety
- Add to existing program
- Extend substation asset life

Advanced Assessments

Osmose has adapted advanced inspection technologies to find hidden conditions that might otherwise go undetected.

Ultrasonic Measurements

Use of ultrasonic thickness gauges is an effective and accurate method of measuring the wall thickness of tubular structures for section loss due to corrosion without the need to access the interior.

Thermography

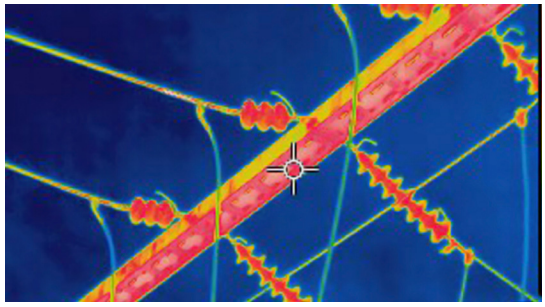
Infrared thermography can help locate internal areas of the structure that may be collecting water. These areas are prone to corrosion activity and when the right conditions exist, they are also vulnerable to freezing which can deform or even crack steel.

Aerial Assessment

Uncrewed Aerial Systems (UAS) are efficient and quick to deploy. Our aerial assessments are conducted by certified and trained UAS pilots leveraging several sensing technologies to safely map substations and perform reliability scans.

Internal Borescope

The use of an internal borescope can reveal corroded or otherwise damaged areas within a tubular structure to determine whether additional follow up is needed.



Overhead Thermography

Infrared equipment can help to detect areas of concern on overhead line equipment before they become a problem. Scheduled maintenance can identify issues early and help avoid unscheduled equipment failures and outages.

Grounding Condition Assessment

Testing of the substation grounding components can locate and identify areas of weakened integrity and performance. Identifying and correcting these areas improves grounding performance as well as the overall equipment and personnel safety.

Structure Restoration and Corrosion Mitigation

In many cases, just identifying structures in poor condition isn't enough and restoration of the structure or mitigation of corrosion is required. Osmose can provide both restoration and mitigation services to address almost any issue affecting steel or concrete.

To learn more, contact your local Osmose professional, call 770.632.6700, or email steel@osmose.com.