Cathodic protection (CP) is typically used as a secondary mitigation method, in conjunction with coatings, to protect steel structures in corrosive environments.

Osmose provides turnkey mitigation design and installation of CP systems for various types of steel transmission structures, in different environmental conditions, that help extend the asset’s useful service life.

CP does not eliminate corrosion activity, but rather transfers the activity from the steel structure to consumable anodes which sacrifice themselves to protect the asset.

The design and placement of anodes often vary from structure-to-structure due to terrain and site conditions. Various size and type anodes can be selected to suit a variety of site restrictions. Anodes are typically placed alone or in groups near the structure. The designed service life of a cathodic protection system can typically be customized to suit your utility’s needs.

CP systems require periodic monitoring to ensure their continued performance. Structures in remote or difficult-to-access areas may be monitored with remote monitoring units (RMUs), in either cellular or satellite configurations, which can transmit data back to your utility without the need for field visits.

Two Types of Cathodic Protection Systems

1. **Galvanic CP** is the ideal application for steel structures at most electric utilities due to ease of installation, limited maintenance, and lower costs.

2. **Impressed current systems** are typically used on larger structures and in applications, such as gas pipelines, where galvanic anodes cannot economically provide enough current for adequate protection.

Contact your local Osmose professional, call 770.631.6995, or email steel@osmose.com.