NACE Standards and Specifications Related to Electric Infrastructure Systems			
NACE Standard	**Title**	**Type**	**Scope**
NACE SP0215-2015/IEEE Std 1839	NACE/IEEE Joint Standard Practice for Below-Grade Corrosion Control of Transmission, Distribution, and Substation Structures by Coating Repair Systems	Standard Practice	NACE/IEEE joint standard provides general coating repair guidelines for in-service carbon steel and galvanized steel electric transmission structures coated with polyurethanes, moisture cure urethane (MCU) coal tar, epoxy, coal tar epoxy, and cold-applied tape systems including petrolatum and polyethylene.
NACE SP0315-2015/IEEE Std 1835	NACE/IEEE Joint Standard Practice for Atmospheric (Above Grade) Corrosion Control of Existing Electric Transmission, Distribution, and Substation Structures by Coating Systems	Standard Practice	This NACE/IEEE joint standard was prepared to assist personnel responsible for maintenance painting of above-grade electrical support structures for utilities and large industrial facilities. The standard provides procedures to (1) assess structures for atmospheric corrosion; (2) assess the level of risk to the structure in terms of corrosion attack and degradation to the existing coating system; (3) make informed decisions based on those findings as to whether coating repair is needed, and if so, to what extent; and (4) apply repair coatings to the structure if applicable. This standard applies to the repair of above-grade atmospheric coatings and serves as a resource for preparing specifications to achieve the successful coating of utility structures.
NACE SP0415-2015/IEEE Std 1895	NACE/IEEE Joint Standard practice for Below-Grade Inspection and Assessment of Corrosion on Steel Transmission, Distribution, and Substation Structures	Standard Practice	This NACE/IEEE joint standard provides requirements to: (1) help electric utilities identify structures that may be at a high risk for below-grade corrosion; (2) excavate and inspect the selected structures; (3) categorize the condition of structures based on corrosion degradation; (4) prioritize structures requiring additional inspection based on those findings; and (5) help identify next steps as required. The standard is limited to the inspection and assessment of steel transmission towers, poles, and substation structures, to include galvanized, self-weathering, and painted mild steel structures, as well as other similar structures.
SP0515-2015	Nondestructive Evaluation (NDE) Technologies to Evaluate Buried Pipe in Nuclear Power Plants	Standard Practice	This standard is intended for those managing, planning, selecting, implementing, or evaluating buried pipe inspections using Non-Destructive Evaluation (NDE) at nuclear power plant sites. It provides direction for planning and implementing a buried pipe inspection at a nuclear power plant. It provides guidance on: • Pre-assessment activities for nuclear power plants • Factors to consider when selecting NDE for buried pipe inspections • Post-assessment of NDE results Guidance specific to owners of nuclear power plant buried piping has been included to improve inspection success by addressing a number of complicating conditions that could exist at a site, such as: • License requirements and regulations that are unique to nuclear power plants must be considered and adhered to, as they require unique processes and procedures for planning and implementing inspections. • Piping layouts with multiple components such as elbows, reducers, tees, etc. that require the use of special inline tools and/or experienced analysis. • Piping systems at nuclear power plants are generally commonly grounded, which impacts the effectiveness of some indirect examination techniques. • The excavations for inspection purposes may be very deep and below layers of other buried piping systems, cables and other structures.
SP0487-2007	Considerations in the Selection and Evaluation of Rust Preventives and Vapor Corrosion Inhibitors for Interim (Temporary) Corrosion Protection	Standard Practice	Provides guidance and best practices to users of interim, or temporary, coatings for corrosion protection of metals, including performance criteria, selection, surface preparation and application, evaluation of coatings, and other usage requirements. Quality control criteria are listed to enable the manufacturer and user to select appropriate test procedures to maintain prescribed standards. The standard is intended to assist the new buyer or user as well as the experienced user of interim coatings in the proper selection and evaluation of these coatings.
SP0297-2012	Maintenance Painting of Electrical Substation Apparatus Including Flow Coating of Transformer Radiators	Standard Practice	A guide for maintenance personnel for utilities and large industrial concerns who are responsible for painting electrical equipment. Use of the standard is intended to help protect equipment from the detrimental effects of corrosion and help it perform to the fullest extent of its operating life.
42102-2002	Corrosion in Power and Communication Manholes	Report	This state-of-the-art report presents methods of indentifying corrosion in power and communications manholes and identifies methods used to mitigate the effects of corrosion within the confines of the manhole.
41013-2013	State-of-the-Art Report: External Corrosion, Assessment, and Control of Buried Piping Systems in Nuclear Power Plants	Report	Recent operating experience from nuclear power plants, particularly those located in the United States, many of which are between 30 and 40 years old, indicates that degradation of buried piping is occurring in at least some plants and represents an issue requiring the attention of the nuclear industry. This NACE International technical committee report provides an overview of issues associated with buried piping in nuclear power plants that might be applicable worldwide. The report identifies issues for corrosion professionals to consider when addressing degradation of buried piping in nuclear power plants. It includes topics related to the external corrosion of buried piping, i.e., piping that is in direct contact with soil or concrete. It does not include topics related to internal corrosion of buried piping; corrosion of buried tanks, such as those in contact with soil, concrete, or underground piping; and tanks, i.e., those enclosed in a vault or trench.