

Permanent Reference Electrodes

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Abstract

GRTgaz decided in 2007 to install remote monitoring systems in all CP devices: impressed current stations, drainage stations and ac mitigating devices.

In 2013, GRTgaz launched its program to install remote monitoring units on test stations to follow-up continuously the general assessment of the cathodic protection system.

In parallel, from 2012, GRTgaz led a research program with ENGIE Lab CRIGEN to get feedback on some types of permanent reference electrodes chosen for test stations. This program included first, laboratory tests on different marketed reference electrodes, followed by more than 2 years of field tests of the most stable and accurate devices identified in laboratory. It helped to define the reliability and the maximum tolerable error for the permanent reference electrodes in field conditions.

It confirmed there are relevant choices to make for permanent reference electrodes installed on test stations.