

# Code for Cathodic Protection of Gas Facilities

Deliberation/Resolution by Gas Technical Standards Committee : February 17, 2023 Approval by the Ministry of Trade, Industry & Energy : March 6, 2023

## Gas Technical Standards Committee

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This code is the detailed standards established by the Gas Technical Standards Committee in accordance with Article 22-2 of "High-Pressure Gas Safety Control Act", Article 45 of "Safety Control and Business of Liquefied Petroleum Gas Act" and Article 17-5 of "Urban Gas Business Act", Article 48 of "Hydrogen Economy Promotion and Hydrogen Safety Management Act". Since conformity to this Code is deemed to conform to the laws and regulations above, this Code must be observed.

This English version of KGS Code is an informal translation from its Korean original version. Only the Korean version of the KGS Code is officially effective since it has been authorized by the Gas Technical Standards Committee (KGS Code Committee). The secretariat of the Committee reserves the right to revise the English version whenever translation errors are found.

History of Establishment and Revision of KGS Code		
Code Number	KGS GC202 <sup>2023</sup>	
Code Title	Code for Cathodic Protection of Gas Facilities	

Date of Establishment/Revision	Description
December 30, 2008	Established (Notification of the Ministry of Knowledge Economy, No. 2008-379)
May 15, 2009	Revised (Notification of the Ministry of Knowledge Economy, No. 2009-193)
August 7, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy, No. 2015-436)
December 10, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy, , No. 2015-641)
January 8, 2016	Revised (Notification of the Ministry of Trade, Industry & Energy, No. 2016-006)
November 23, 2016	Revised (Notification of the Ministry of Trade, Industry & Energy, No. 2016-603)
August 10, 2018	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2018-419)
August 9, 2021	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2021-583)
December 1, 2022	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2022-848)
March 6, 2023	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2023-220)

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#### **Code for Cathodic Protection of Gas Facilities**

#### 1. General

#### 1.1 Scope

This Code applies to the cathodic protection systems and their maintenance for corrosion protection of gas facilities subject to the High-pressure Gas Safety Control Act (hereinafter referred to as "the High-pressure Gas Act"), the Safety Control and Business of Liquefied Petroleum Gas Act (hereinafter referred to as "the Liquefied Gas Act") and the Urban Gas Business Act (hereinafter referred to as "the Urban Gas Act").

#### 1.2 Validity of Code

**1.2.1** This Code has passed the deliberation and resolution by Gas Technical Standards Committee (Bill No. 2023-1, February 17, 2023) in conformity to the High Pressure Gas Safety Control Act, Article 33-2, in accordance with the Urban Gas Business Act (hereinafter referred to as "Act"), Article 17-5, Clause 2, has been approved by the Ministry of Trade, Industry & Energy (Notification No. 2023-220 of the Ministry of Trade, Industry & Energy, March 6, 2023), and is valid and effective as the detailed standards in conformity to the Act, Article 17-5, Clause 1.

**1.2.2** Conformity to this Code is deemed to conform to Table 6-2, No. 2 of the Enforcement Regulation in accordance with the Act, Article 17-5, Clause 4. < Revised on August 7, 2015>

#### **1.3 Definitions**

The terms used in this Code are defined as follows:

**1.3.1** "Cathodic protection" means prevention of the electrolytic corrosion of steel pipelines and storage tanks by blocking the anodic reaction through impressing of electric current to the external surfaces of steel pipelines and storage tanks installed underground or underwater.

1.3.2 A "sacrificial anode system" means a corrosion protection system which prevents the

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