

# IEEE Recommended Practice for the Interface of New Gas-Insulated Equipment in Existing Gas-Insulated Substations Rated above 52 kV

IEEE Power and Energy Society

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IEEE Std C37.122.6™-2013  
(Revision of  
IEEE Std 1416™-1998)

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Approved 11 December 2013

**IEEE-SA Standards Board**

**Abstract:** Recommendations for the connection of gas-insulated substation to another gas-insulated substation of a different make or design are given. IEEE Std 1416™ is replaced by this recommended practice.

**Keywords:** extension, gas-insulated substation (GIS), gas-insulated transmission line (GIL), interface, IEEE C37.122.6™, IEEE 1416™

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## Introduction

This introduction is not part of IEEE Std C37.122.6-2013, IEEE Recommended Practice for the Interface of New Gas-Insulated Equipment in Existing Gas-Insulated Substations Rated above 52 kV.

Gas-insulated substations (GIS) are proven technologies covered by international standards and guides. But so far, very little guidance has been made available to utilities when they have to connect a GIS to a GIS of another make or design. This document defines a recommended practice to cover such a case. This document is a revision and replaces IEEE Std 1416-1998, reaffirmed in 2004.

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## 1. Scope

This document gives the recommended practices for designing and installing the interfaces between existing gas-insulated substation (GIS) equipment and new GIS equipment that is added at a later date and may be of different design and of different manufacturer. The recommended practices apply for GIS rated above 52 kV. They also include the interfaces between gas-insulated line (GIL) equipment and GIS equipment rated above 52 kV.

## 2. Normative references

The following referenced documents are indispensable for the application of this document (i.e., they must be understood and used, so each referenced document is cited in text and its relationship to this document is explained). For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies.

ASTM D2472-00, Standard Specification for Sulfur Hexafluoride.<sup>1</sup>

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<sup>1</sup> ASTM publications are available from the American Society for Testing and Materials (<http://www.astm.org/>).