1. Scope of application

This standard is a remote control system used to constantly monitor the operation status of GIS and detect any abnormality inside.

Applied to function, performance, packaging, transportation and other matters according to installation of integrated GIS partial discharge diagnosis system

Other matters not specified in this standard are subject to international standards such as IEC, general regulations of KEPCO, and our company.

It is determined by consultation between the contracting party and the

2. Definition of terms

2.1 GIS Partial Discharge Diagnostic System

The partial discharge signal generated when the GIS internal malfunction is acquired through the sensor and through the DAU of the Local Unit

The processed digital signal is transmitted to the diagnostic unit through the data CU (communication unit) to prevent partial discharge.

Monitoring, analyzing, diagnosing, and transmitting the data judged as abnormal symptoms to the HMI SEDA of the dispatch branch unit.

Sensor, Local Unit (including DAU and CU), Diagnostic Unit (including diagnostic software), and HMI as a system

system that includes

2.2 Diagnosis Unit

Diagnosis result by analyzing partial discharge signal converted to digital value in local unit with diagnosis algorithm

, generate an alarm, provide it to the operator, and send information when accessed from a KEPCO remote PC.

It is a unit equipment of Web Server function that plays a role of providing

Real-time data acquisition of events, alarms, measured values, and alarm set values ​​generated in the diagnostic unit of the device.

Comprehensive linkage of facility information stored in various transmission and substation systems such as data storage and STOM, and AI/Big-Data analysis

A system that automatically determines and manages real-time facility status through analysis

2.7 Remote KEPCO PC

Various events and alarms stored in the diagnosis unit, real-time sensor data, and GIS part through web service requests

You can check the discharge diagnosis system resource status in a web browser and modify the alarm settings.

A PC connected to the KEPCO network that performs the function

3. System Configuration

3.1 System configuration diagram