SIEANG

CSGC-3000E/OCS
Energy Management System

01 Product Overview

The CSGC-3000E/OCS Energy Management System (hereinafter referred to as "the system")is developed by Beijing Sifang Automation Co., Ltd. for the modern power system. Built on the CSGC-3000E general software platform, it integrates SCADA, EMS, PAS, AGC, AVC, DTS, DMS, and OMS into a next-generation operation, scheduling, control, and management system for power systems.The system provides strong support for the automation, digitalization, and intelligent development of power systems. It] /] asye syed " a ᴰ ҫ] /er] /ocnag ḍ ľ Ó ig nag Ã sy

02 Main Functions

Control Center

| Control Adjustment and Anti-error | Sequence Control | Setting Value Management | Feeder Automation | Automatic Voltage Control (AVC) | Automatic Generation Control (AGC) | Precise Load Control | Operation Tickets | Work Tickets | Dispatch Log Management | Operation Duty Management | New Energy Intelligent Control

Power Grid Analysis

| Real-time Topology Analysis | Single-phase Ground Fault Handling | Load Transfer | Loop Analysis | Network Restructuring | Load Estimation | Network Topology Analysis | Online State Estimation | Dispatcher Flow | Short-circuit Current Calculation | Static Security Analysis | Sensitivity Analysis | Power Grid Fault Simulation | Load Forecasting | Generation Forecasting | Network Loss Calculation | Dispatcher Training Simulation DTS

Data Center

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03 Features

The system aims to assist the automation, digitalization, and intelligence development of the power system, with the following main features:

Comprehensive Data Monitoring

The system can collect and monitor substations of different voltage levels, different types of terminals and electricity consumers.

It horizontally covers the power system structure of transmission networks, distribution networks, and renewable energy; vertically supports hardware virtualization, data service, and modular software three-layer design architecture for application functions.

Macroscopically, it integrates SCADA, EMS, AGC, DTS, DMS, and OMS; microscopically, it can monitor real-time power data at the millisecond level.

Modular Advanced Application

The system offers multiple advanced application services, such as PAS, AGC, AVC, DTS, forecasting, etc., which are loosely coupled with the support platform, allowing for on-demand use, plug-and-play, and strong scalability, making it flexible and convenient.

Intelligent New Energy Monitoring

The system is friendly to centralized and distributed renewable energy access, achieving intelligent aggregation and analysis of adjustable generation, and has coordinated control functions of “Generation-Grid-Load- Storage”.



The system digitizes and automates model files, greatly reducing the workload of model maintenance.

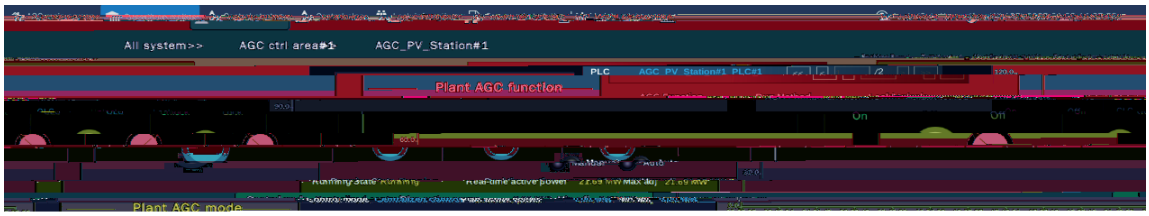
In the transmission network, based on the grid CIM model and the GIS coordinates of substations, it supports the automatic generation of power flow diagrams and substation single line diagrams;

In the distribution network, it supports the automatic generation of feeder single-line diagrams, system connection diagrams, low-voltage distribution transformers diagrams, etc.

The system can be standardized to connect with various intelligent terminals and automation systems.

It adopts standard protocols such as IEC 60870-5-101, 104, ICCP, DNP3.0 to connect with various intelligent terminals; based on IEC 61970/61968 CIM standar
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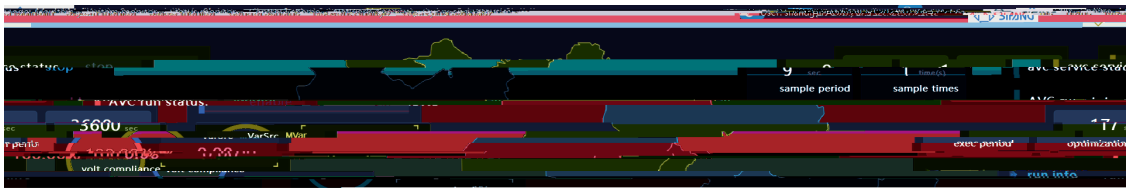
04 Typical Interfaces



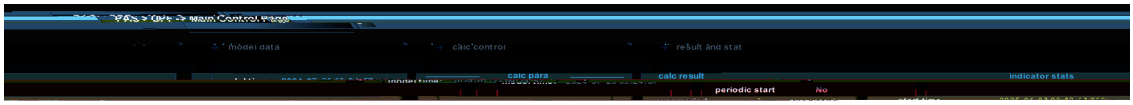
AGC HMI



DTS HMI



AVC HMI



Power Flow HMI

Stock Code
601126

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