


TEPCO Power Grid (TEPCO PG) Deploys SilentDefense for Detecting Anomalies in Its Power Grid

With the number of cyberattacks constantly on the rise and the upcoming Tokyo 2020 Olympic Games, TEPCO PG selected SilentDefense to enhance the cyber resilience of its industrial infrastructure and the security of Japanese social infrastructure.



Project delivered for
TEPCO Power Grid:



Project delivered in cooperation
with Macnica Networks:



The Objective

Implement a situational awareness and anomaly detection solution to assist in mitigating rising internal and external threats to TEPCO PG's industrial control systems and to the Japanese social infrastructure.

The Challenge

TEPCO PG is the largest electric power company in Japan. It delivers approximately 33% [1] of the total power in the country and serves the Tokyo metropolitan area, the center of the Japanese economy. With such an extensive infrastructure, TEPCO PG required a monitoring solution that was powerful, scalable, robust and flexible.

The technology was selected based on these core requirements:

- No need to change the existing system
- Non-signatures based detection, capable of detecting zero-day and targeted cyberattacks
- Ability to process TEPCO PG's proprietary protocols
- High quality support in Japan

The Solution

SilentDefense's capabilities and maturity combined with the excellent qualities of Macnica Networks exceeded all competitors.

TEPCO PG has introduced SilentDefense into all of its industrial networks to quickly detect threats to and malfunctions of their industrial infrastructure.

SilentDefense has quickly been able to process TEPCO PG's proprietary protocols, revealing insights into communications and process values. As part of the project, SilentDefense will be fully integrated into the company's Security Event and Incident Management system (SIEM).

The Results

TEPCO PG enhanced its capability to detect and respond to external and internal cyber and operational threats. This provides an increased level of security and availability of Japanese social infrastructure with continuous return on the investment.

During the initial deployment, SilentDefense proved fundamental in identifying suspicious activity coming from external hosts and providing visibility into anomalous process values. With the support of Macnica Networks, TEPCO PG has successfully rolled out SilentDefense within its industrial infrastructure.

[1] <https://www7.tepcoco.jp/pg/supply/quality/index-e.html>