

# VECO PROTECTION RELAY COMMUNICATION TO SCADA

USING MOXA EDS-505A

<b>APPLICATION:</b>	SCADA
<b>INDUSTRY:</b>	Power
<b>REGION:</b>	Philippines

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## SYSTEM REQUIREMENTS

- TACACS+, SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- Industrial Grade and Rugged design to withstand harsh environmental conditions, such as high temperature , and humidity.

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## WHY MOXA?

- Turbo Ring and Turbo Chain (recovery time < 20 ms @ 250 switches), and STP/RSTP/MSTP for network redundancy
- TACACS+, SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- Easy network management by web browser, CLI, Telnet/serial console, Windows utility, and ABC-01

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## INTRODUCTION

Visayan Electric Company, Inc. is the second largest electric utility in the Philippines. It serves the cities of Cebu, Mandaue, Talisay, Naga, and the municipalities of Liloan, Consolacion, Minglanilla, and San Fernando. Its franchise covers an area of about 674 square kilometers with an estimated population of 2.6 million as of 2020.

Visayan Electric utilizes various state-of-the-art technologies in its operations to improve its efficiency and service. It uses a SCADA (Supervisory Control and Data Acquisition) system to monitor and control its electric distribution assets via remote control. It also has a GIS (Geographic Information System) to map and manage its facilities.

Visayan Electric is owned and managed by publicly-listed AboitizPower Corporation (PSE: AP) and Vivant Corporation. Approximately 800 individual shareholders comprise the Visayan Electric shareholders' roster.

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## MOXA SOLUTION

- The EDS-505A standalone 5-port managed Ethernet switches, with their advanced Turbo Ring and Turbo Chain technologies (recovery time < 20 ms), RSTP/STP, and MSTP, increase the reliability and availability of your industrial Ethernet network. Models with a wide operating temperature range of -40 to 75°C are also available, and the switches support advanced management and security features, making the EDS-505A switches suitable for any harsh industrial environment.

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## MOXA SOLUTION

- **Protection of Critical Infrastructure:** Utility companies manage critical infrastructure that is vital for public services. Unauthorized access or attacks on this infrastructure could lead to service disruptions, safety hazards, or even large-scale blackouts.
- **Data Integrity and Confidentiality:** Ensuring the integrity and confidentiality of data transmitted across the network is crucial. Features like HTTPS, SNMPv3, and SSH encrypt data, making it difficult for unauthorized parties to intercept or alter information. This is important for both operational data (e.g., power grid status) and customer data (e.g., billing information).
- **Authentication and Authorization:** Features like TACACS+ and IEEE 802.1X ensure that only authorized personnel and devices can access the network. This helps in preventing unauthorized access and potential malicious activities from internal or external threats.

