

A stylized map of the Asia-Pacific region is centered on the slide. The map is white and overlaid with a network of yellow lines and dots, representing a global or regional communication network. The background is a dark teal color with a subtle pattern of light teal geometric shapes and lines.

APAC Sales Meeting

Dec 2022

MES-Engineering Vietnam., JSC/Vietnam
Nguyen Tuan Anh

Project overview



Project	Equipping PTC2's Substation without Operator	Start	May, 2020
Customer	Power Transmission Company No.2 (PTC2) – Vietnam Electricity (EVN)	Value	725.000 Euro
Project Phase	Currently in construction, BENDER Product will be delivered in 12-2022		
Customer Goals	<p>PTC2 is one in 4 company of Nation Power Transmission Corporation, under Vietnam Electricity (EVN). PTC2 manages 4 500kV substations and 15 220kV substations. The project requires to be equipped with DC Earth-fault monitoring and locating system in 12 220kV substations and in operation center.</p> <ul style="list-style-type: none"> • Large number of substations 220kV • Substations were built for long time, large DC system from main-house to bay-house. 		
Project Description	<p>May, 2020 to January, 2022: Design and approve the budget estimate DC Earth fault locating system was added to main project during this time. Q2, 2022: Bidding and selection of contractors for DC Earth fault Package. Q3, 2022: Order BENDER. December, 2022 : Package 1 to be delivered to Site. Q1, 2023 : Installation and Commissioning for 1st Stage Q1, 2023 : Delivery Package 2 to Site Q2, 2023 : Installation and Commissioning for 1st Stage</p>		

Final Product Pictures



Application (Picture)



At a glance



Customer problem

Customer request:

- Continuous monitoring of insulation of 110VDC/220VDC systems of substations;
- Earth-fault Locating from Operating Center;
- Locating fault in Cabinet and Cable-way of site.

Solution

Earth fault monitoring : ISO685-D-P, EDS441-L-4, CTAC35/01, and portable locating devices EDS195PM, PSA3320 and PSA3052. Data are transferred to software in the Operating center

Benefit for the customer

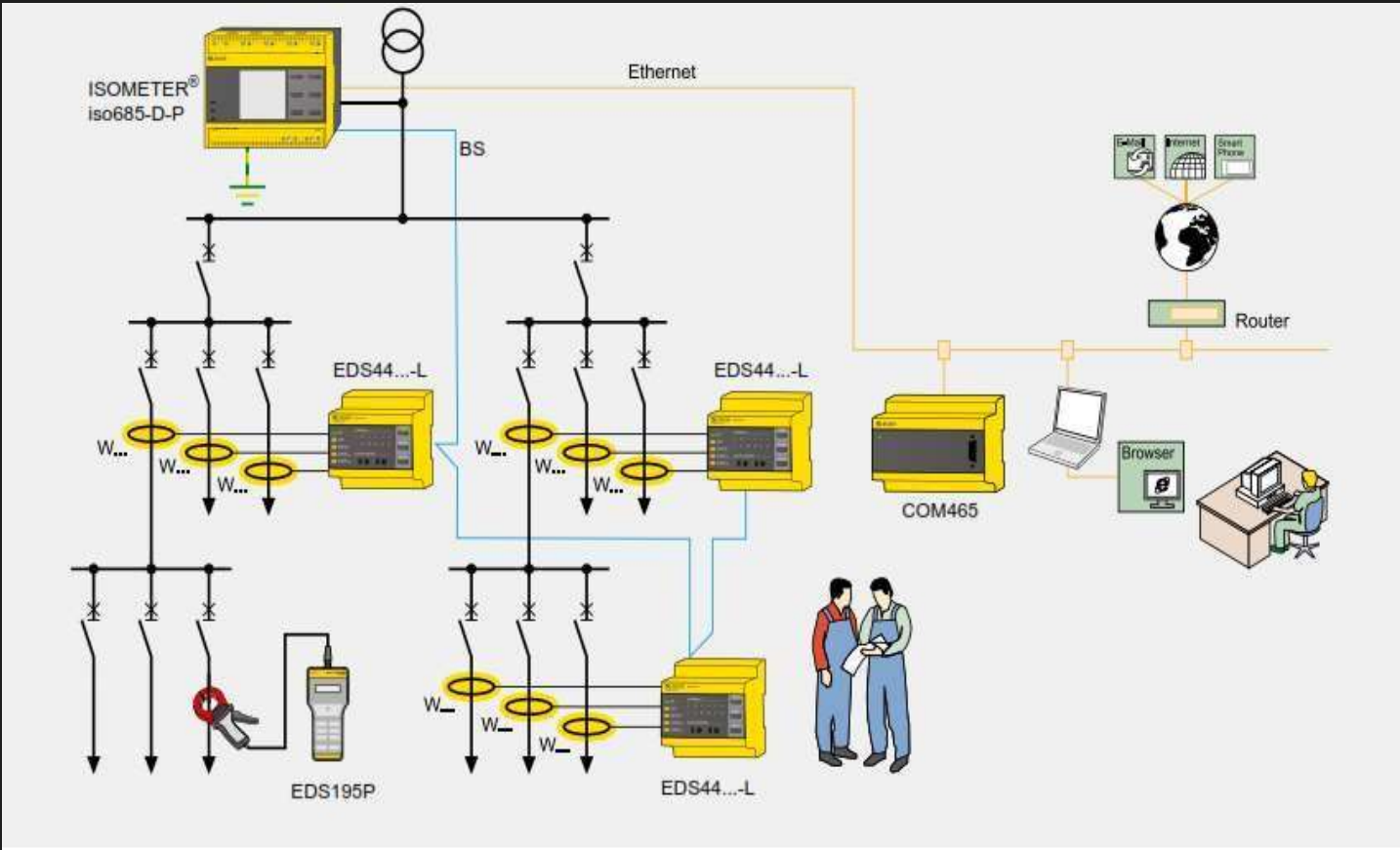
- Continuous monitoring of insulation of systems;
- System status early warning;
- Locating Feeder having earth-fault
- Monitoring on SCADA/DCS system;
- Easy expansion system.

Project scope

Value : 725.000 Euro
25 Fault Locating Systems



Single line diagrams



Decision on the requirement to equip the fault location system of EVN – Electricity Vietnam



- DEMAND OF SYSTEM WAS CREATED.
- DECISION WAS ISSUED BY VIETNAM ELECTRICITY (EVN) – FROM TOP MANAGEMENT.
- REQUIREMENTS WERE PUSHED FROM TOP MANAGEMENT TO SUB-COMPANIES.
- BENDER EARTH FAULT LOCATING SYSTEM HAVE MORE ADVANTAGE IN BIDDING, THEN CHOSEN BY PTC2 / EVN

Sample pictures of equipment installed in DC system

