

Switching from diesel generator supply to shaft generator supply and back is now a safe, intelligent one-button command.

After wiring, replacing Vingatank's old PLC control system took just one day, including setting up and testing the application.

A Bureau Veritas classed I 3/3 E+ Chemical Tanker/Oil Tanker, Vingatank was built at Celik Tekne, Tuzla, Turkey, in 2002.

Equipped with a 4,728 m³ (4,633 m³ 98 %) cargo tank capacity, Vingatank is a medium-sized tanker able to serve most ports in the Baltic, Scandinavia, the Continent and Great Britain.

Application Challenge

After just seven years of operation, the Vingatank's owner wanted a more efficient and user-friendly control solution for the one shaft generator and three diesel generators on board, replacing the vessel's original PLC-based power management system with a flexible multi-master system for protection and power management.

A complex solution, the ship owner encouraged a rapid commissioning process to keep downtime to a minimum.

Vingatank

Founded in 1958 as Vingatank AB, Swedia is a family-owned Swedish shipping company with a fleet of smaller tankers classed for both petroleum products and chemicals.

swedia

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Data

- Automatic one-touch operation
- Dedicated shaft generator mode
- Parallel operation between DG/SG
- Heavy consumer control as standard
- Integration to Alarm and Monitoring System (AMS)

Product



Protection and Power Management, PPM-3

DEIF Solution

After wiring, retrofitting Vingatank's power management system took just one day, including setting up and testing the application.

DEIF's solution included remote control option via an additional operator panel (AOP-2) on the bridge with a simple two-wire CANbus connection to the PPM-3 system in the engine and control room. The panel features one-touch operator sequences and LED indications of important status and alarm messages: switching from "diesel generator supply" to "shaft generator supply" is done simply by pressing the shaft generator breaker push button "ON". When "shaft generator supply" has been selected the connected diesel generator(s) begin synchronising the shaft generator breaker. Once the shaft generator breaker is closed, the diesel generator(s) will de-load and switch off. Changing back to "diesel generator supply" is done by pressing the shaft generator breaker push-button 'OFF'. Depending on load condition and priority, the necessary number of diesel generators will start up and begin synchronising to the main busbar. Once the diesel generator breaker(s) have been connected, the shaft generator breaker will de-load and re-open.

Case Diagram

