

Energy Storage

Expect more from your power system

The marriage between a comprehensive and flexible protection platform and one or more energy storage systems has the potential to revolutionize what we will come to expect from diesel electric power systems.

Benefits with Energy Storage



Spinning Reserve

Energy Storage System is connected and running but not charging or discharging energy into the system. On loss of generating capacity it steps in to take the load for a predefined period of time. If other functions are activated simultaneously, this function ensures that sufficient energy reserve is left in battery. The spinning reserve function allows operation with fewer generators online, resulting in more optimal engine loading with improved fuel efficiency and reduced accumulated running hours.



Peak Shaving

Energy Storage System absorbs load variations in the network so that engines only see the average system load. The system will level the power seen by engines and offset the need to start new engines. Peak shaving will improve fuel efficiency and reduce engine running hours.



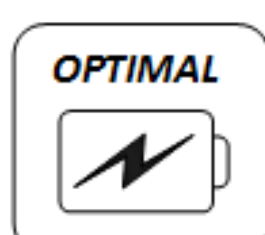
Enhanced Dynamic Performance

Energy Storage System absorbs sudden load changes and then ramps the change over on running engines. If peak shaving is used, then this function is automatically included. It provides instant power in support of running gensets. The system also enables the use of «slower» engines, like LNG/Dual Fuel engines in dynamic power applications.

UPS

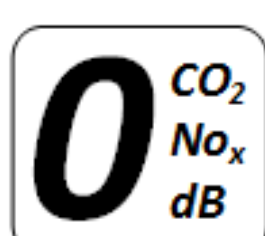
Enhanced Ride Through

Same as spinning reserve, but on a local level in a sub-system like a thruster or drilling drive. The enhanced ride through will create a higher power system availability and new ways of achieving higher ERN numbers. The energy storage system can give UPS like functionality for all or portions of a power system.



Strategic Loading

Energy Storage System interacts with the power system to optimize engine fuel efficiency. ES media is charged and discharged in such a way that the operating point of online generators is optimized so that power is only generated at peak efficiency and lowest cost.



Zero Emissions Operations

Energy Storage System powers the system so that engines can be turned off. This enables things like zero-emissions in harbour and/or quiet engine room during maintenance.

