

Client requirement

On a very tight time line, convert the electrical equipment on three commercial vessels to meet U.S. military specifications.



Point Eight Solution

Work closely with the shipbuilding company to accelerate the conversion process.

It was very clear to military strategists after Operation Desert Storm in 1991 that United States needed a greater ability to move cargo by sea to overseas conflicts – tanks, armored personnel carriers, tractor-trailers and other combat equipment and supplies. During the Gulf War, the military was forced to charter non-U.S.-flag ships to get equipment to the Middle East.

With this realization, Congress passed the Strategic Sealift Program. As part of SSP, the U.S. Navy ordered 20 large, medium-speed, roll-on/roll-off (RO/RO) ships, fifteen new and five conversions. RO/ROs are designed so that wheeled cargo can be loaded and unloaded on ramps that go from ship to pier. This type of ship was first used about 100 years ago when steam trains were too wide for the existing bridges. The trains were rolled onto a boat or barge and transported across the river to another rail berth. Versions of RO/ROs greatly helped the Allied cause in World War II.

The National Steel and Shipbuilding Company (NASSCO) was contracted by the U.S. Navy to convert three Maersk commercial-line vessels and build eight new vessels for the Sealift program. NASSCO brought in Point Eight Power for both the conversion and new construction electrical systems.

While the majority of the electrical equipment on the vessel was commercial grade due to its noncombatant status, it was required that the emergency switchboard adhere to “military” Mil 901D standards. This was the first time Point Eight worked with the Mil 901D specifications. Additionally, there was a massive 12,000-ampere bus requirement on the 480V main switchboard – another first for both Point Eight and NASSCO. Even with these massive bus requirements, the project had to follow ANSI and NEMA standards.

Another unique feature that Point Eight incorporated was that of a special lighted mimic bus system located at each lineup of switchgear that allowed the user to control and monitor breaker status and synchronization at locations remote to each switchboard.

Teaming up with Cutler-Hammer, Point Eight used that company's power and molded case breakers for all switchgear applications and as well as their "IMPACC" communications system. Standard design Cutler-Hammer Advantage Series MCCs were customized to meet the client's requirements. Finally, a Whipp and Borne Mil-spec power breaker was used for the Mil spec emergency switchgear.

In order to facilitate "spares" requirements for the 3,000+ molded-case circuit breakers on the 11-vessel program, Point Eight set up a parts-acquisition system that shortened the procurement and acquisition process. NASSCO continues to use Point Eight for vessel parts.

Point Eight Power. Controlling the Power You Generate



Point Eight Power supplied for each vessel 30 sections of 480V low-voltage switchgear; an 8 section 120V/480V combined low-voltage Mil 901D emergency switchboard; 40 sections of MCCs; more than 50 individual controllers; and 150 panel boards. Point Eight also upgraded the existing switchboard and worked with existing IEC equipment.