

Power Connection Stations for a Large Dry Dock

Electrical Acceptance Testing

Acceptance testing commonly uncovers gaps in installations that require expert intervention to ensure energization deadlines are met.

CHALLENGE

This dry dock supports critical maintenance, refits and recommissioning of large seagoing vessels. During preliminary evaluation of the upgraded power distribution equipment, the ABM acceptance testing team uncovered relays for medium voltage gear that had not been programmed.

The relays would not perform as intended without the programmed logic. Breakers would not trip when required, and the system would not safely and properly respond as designed.

With the gear manufacturer and the relay vendor responsible for limited deliverables, the electrical contractor faced an energization deadline without the relay logic needed to complete the necessary acceptance testing.

SOLUTION

Relay programming was beyond the original project scope, but an ABM NETA IV Relay Field Engineer stepped up to protect the schedule.

A meeting with the end-user client confirmed the desired function. Knowing the relay's technical requirements, the engineer developed and submitted logic for the relays. The electrical contractor approved ABM's submission, and the field engineer programmed the relays, allowing the main switchgear to function as designed by the engineer of record.

With that hurdle behind the project team, acceptance testing could move forward for the medium voltage utility mains, feeders, main switchgear, and relays.



BENEFITS

The electrical contractor's schedule was protected, and the end-user's timeline was met.

As an electrical acceptance testing partner, ABM committed to apply their experience with the overall project, the relevant safety requirements, and the client's needs, to help the electrical contractor deliver a complete distribution system on time.

Pairing their complete picture of project needs with their experience handling logic problems for relays, ABM Electrical Power Solutions was able to diagnose the gap and provide a highly custom, technical solution in a timely fashion.

- Electrification deadlines were met.
- Safe function of electrical distribution equipment as designed was preserved.
- Costly construction delay penalties avoided.

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