CASE STUDY

Temporary Power Provision During Preventative Maintenance For Large Energy Provider

Power station maintenance is a major undertaking that requires the right rental equipment and expertise to properly manage the job. Sunbelt Rentals is able to provide just that.

One of the nation's largest energy providers manages a generating station in Boston with eight separate generating units. Although capable of burning both natural gas and petroleum, the station primarily burns natural gas. One of the station's units produces 577.6 megawatts fueled by natural gas, or in periods of high demand, oil. To properly maintain the station's transformer performance, the energy provider contacted our Utility Power Services team to engineer a temporary power solution.

In May 2015, the unit was taken offline for scheduled preventative maintenance. In the past, the energy provider had to remove itself from ISO New England, the regional grid operator, for planned maintenance outages, significantly increasing the cost of the repair. Our ability to keep them on the grid and provide cost-effective power solutions helped us clinch the contract.

The Sunbelt team delivered a fully redundant temporary power solution, which included two 2,000 kW diesel generator sets paralleled together into one 3,750 kVA to 4,160 V step-up transformer, as well as 2,500 feet of 4/0 cable laid from the generators to the transformers and 600 feet of shielded high voltage (type SH 5/15 kV) temporary jumper cables laid from the transformers to the customer tie-in point. Technicians placed the generators online for two days while power plant crews performed the necessary maintenance. The peak load during the shutdown was 3,500 kW when the energy provider turned on a large induced draft (ID) fan inside the plant.

During the planned outage, the operators benefited from our 24/7 support, namely having a technician remain on site as a point of contact. Sunbelt's technicians also performed complete turnkey services, including engineering, logistics, electrical tie-in, fueling services, monitoring and electrical disconnection.

Sunbelt Rentals' temporary power solution helped the energy provider lower operating costs while providing uninterrupted power during the maintenance.

"I've been working with...Sunbelt for nearly a year and have had the opportunity to call on you a half dozen or so times for some planned and some unplanned events. Each time, you always picked up the phone, [have] been able to help develop solutions and provide immediate support in a safe and professional manner. I'm glad to have you as a contact and a resource."

-Principal Engineer

PROJECT RECAP

- Four 2,000 kW generators
- One 3,750 kVA to 4,160 step-up transformer
- 2,500 feet of 4/0 cable
- 24/7 on-site support and fueling services