Cynergy Electric Company, Inc.

NIH
Building 33 Complex
BSL-3 Third Floor
2000KW Load Bank Project

Whiting-Turner Construction Company
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Cynergy performed a contract for Whiting Turner for the installation of a 2000KW load bank in building 33 at the National Institutes of Health. The building already had a 2000KW diesel generator and the load bank was an addition to the project. The load bank was installed outside adjacent to the building with a new 3200AF breaker.

Principle features of the project were as follows;

- Provide one Avtron model K875A 2000KW 480 volt load bank
- Provide a GE 3200AF breaker with shunt trip in a NEMA 3R enclosure
- Provide a model SB2196 remote load bank control panel
- Provide eight sets 600MCM 480 volt load cables connected to the existing distribution switchboard
- Provide new power and control wiring and accessories for the equipment

A difficult feature in the project was the rigging and setting of the load bank. The only access for a crane to set the load bank was a parking lot behind the building. A large crane had to be used due to the weight and distance of the lift. The project required core drilling of the exterior brick/block wall for the entrance of the load cables. The furnishing and installation of SCADA conduit and wiring for the monitoring of the breaker position and load bank controls were included. Whiting-Turner provided the concrete pad and a retaining wall.

Miscellaneous installation items included low voltage circuits to the equipment in support of the control circuits, etc. Commissioning and field testing were a large component in the project. Third party testing was provided for all new cables. Factory field services were provided for the start-up and training of the load bank controls. Hands on training, classroom training and operation and maintenance manuals were provided for all operational systems.

Operator control panel