

ODRC Statewide Emergency Power Hookups

Multiple Campus Locations

Construction Completion: 2018
Construction Cost: \$1,330,000
Tri-Tech Services: Electrical Engineering

Project Description

The Ohio Department of Rehabilitation (ODRC) and Corrections established Emergency Response Teams (ERTs) to improve overall emergency power capabilities. ERTs, in part, provide emergency power to ODRC facilities when local emergency power generation fails. Each of the ODRC's facilities maintains its own unique electrical-service and emergency-power configuration, ampacity, and voltage.

The differing power configurations across facilities posed a challenge to and elevated the need for a consistent process to deploy mobile emergency generators. Tri-Tech worked closely with the owner and client to develop a design that overcame this challenge.

With Whalen Electric as its design-build partner, Tri-Tech developed the standard equipment design that Whalen Electric used to make installations at an initial seven corrections facilities around the state. The design included using permanent docking stations to allow for quick and safe color-coded cabling of the 480V mobile generators to run to each facility's emergency distribution system and posting appropriate signage for safety, as well as incorporating an extensive training program for their staff.

As part of the install, step-up transformers were provided where the emergency power needed to be medium voltage. New manual transfer switches were installed, and existing switchgear were modified in each facility. The new mobile generators are 480V, 1MW machines with integral diesel fuel tanks and will parallel with other ERT machines at various sites, providing adequate power for sites that require more than 1 MW of power.

