

## Cynergy Electric Company, Inc.

**ARE Acquisitions, LLC  
946 Clopper Road  
Gaithersburg, Maryland 20878  
Generator and Switchgear  
Design/Build 1330 Piccard Drive  
Project Manager: Luis Collantes  
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Cynergy provided a design and build project to replace existing paralleling switchgear, replace a 500KW diesel generator and eliminate the need for diesel storage underground and day tanks. The owner came to us with several challenges; to upgrade a under capacity generation system, replace unreliable paralleling switchgear, eliminate the liability of underground diesel storage and diesel day tanks, and provide remote monitoring of the system.

Principle features of the project were as follows;

- Remove one 500KW diesel generator
- Relocate an existing 600KW diesel generator and provide a new UL 2085 base mounted tank
- Install a new 750KW diesel generator with a new UL 2085 base mounted tank
- Replace existing 3000 amp 480v paralleling switchgear
- Provide a HMI (Human machine interface) panel for remote monitoring
- Provide a new concrete pad for the 750KW generator
- Install new actuators and regular on two existing generators
- Provide new fuel piping to an existing generator from an adjacent base tank
- Install a new fuel cooler on an existing generator
- Removal of three existing above ground diesel day tanks and piping

The owner was having trouble maintaining their emergency system during critical periods and wanted to eliminate the potential liability of the existing diesel fuel system. The existing system was old, unreliable, leaking and difficult to obtain replacement components. Cynergy provided a proposal to provide a simple solution to their complicated problems. All necessary emissions, construction and trade permitting were provided. Several trade disciplines were required for the project; electrical, millwright/rigging, mechanical and concrete pad requirements.

The new generator was installed behind an existing privacy fence which diminished air flow so we came up with a solution to provide an up flow discharge plenum to divert the hot air coming off the radiator. The new parallel switchgear had to mate up with existing conduits and 2000 amp bus. All design engineering, drawings, permit applications, demolition and construction services for a complete system was provided and installed with Cynergy's professional Associates.