Reference - Cynergy Electric Company, Inc.

Anacostia WWPS No. 2 Power Reliability
1700 Andalusia Lane
Capital Heights, MD 20781

WSSC
14501 Sweitzer Lane
Laurel, Maryland 20707

Project Manager: Stanley Dabek
301-206-8881

Cynergy performed a $650,501 contract for the WSSC at the Anacostia WWPS completed on April 2, 2010.

The project involved performing electrical upgrades to increase the reliability of the incoming utility power supply to Anacostia WWPS No. 2 by installing a new third feeder originating from the PEPCO Tuxedo substation to supplement the two existing feeders to the facility that originate from the PEPCO Bladensburg substation.

Work associated with the incoming utility feeder was performed by PEPCO. Cynergy provided coordination with PEPCO to meet all their requirements.

The electrical facilities at the Anacostia WWPS No. 2 consist of four (4) 15kV-5kV substation lineups A, B, C and D. The two existing underground Bladensburg feeders #15099 and #15098 supply power to 15kV Switchgear A and 15kV Switchgear C, respectively.

Under the project the work performed by Cynergy included the following:

a. Furnishing and installation of two (2) new 50-foot wooden utility poles and associated guying and anchoring in the vicinity of the main entrance gate
b. Removal of existing relays/metering associated with 15kV breakers 52-P1, 52-P2 and 52-P3. Installation of new GE Multilin SR750 relays in lieu of the removed relays/metering.
c. Replacement of instrument transformers on existing 15kV switchgear lineups.
d. Installation of neon glow tubes and lightning arresters on the existing 15kV switchgear.
e. Installation of modular phone jacks on existing PEPCO meters.
f. Installation of a new remote breaker control cabinet at the substation for local indication of relay alarms, breaker status and breaker control switch for remote breaker operation.
g. Installation of a new cabinet for utility metering provision for the new Tuxedo feeder source.
h. Modification of 15kV circuit breakers 52-P1, 52-P2, 52-P3, and 52-TA control

schematics.
i. Removal of the existing 15kV-5kV, 3750 kVA transformers and associated CT's, differential protection relay cables and neutral grounding resistor.
j. Installation of new 5KV outdoor busway and underground connections between 5kV switchgear for a tie connection.
k. Installation of key interlock system for the 5kV switchgear.
l. Installation of a new 1500AT, 1600 AF draw-out power circuit breaker in 480V switchgear, located on the roof, plus associated key interlock modifications.
m. Installation of underground and exposed conduit and control wiring connections.
n. Perform power system study of proposed electrical system to ascertain revised protective device settings.
o. Programming and testing settings of existing and new protective devices in accordance with the coordination study.
p. Replace existing overhead steel door.
q. Intercept existing concrete encased underground ductbank to install new electrical manhole EMH-P9 in the vicinity of the main entrance gate.
s. Installation of a new two-way electrical ductbank between new utility 50-foot wooden utility pole and new manhole EMH-P9.

Commissioning and field testing were a large component in the project. Testing was performed on each piece of equipment and the completed system as a whole to demonstrate operational capabilities. Third party testing was provided for all medium voltage equipment, switchgear and cables. Factory field services were provided for the modifications to the existing switchgear. Hands on training, as-build drawings and operation and maintenance manuals were provided for all operational systems.