SECTION 26 2817 - GENERATOR DOCKING STATION

PART 1 - GENERAL

1.1 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NFPA 70.

1.2 GUARANTEE/WARRANTY

A. The equipment installed under this contract shall be left in proper working order. Replace, without additional charge, new work or material which develops defects from ordinary use within one year.

B. New materials and equipment shall be guaranteed against defects in composition, design or workmanship. Guarantee certificates shall be furnished.

PART 2 - PRODUCTS

2.1 GENERATOR Docking Station

A. Manufacturers: Subject to compliance with requirements, provide products by the following:

1. TRYSTAR: GDS

2.2 GENERAL REQUIREMENTS

A. The permanent Generator breaker shall be Kirk Keyed in common with the access panel covering the portable generator Camloks so that the portable generator cannot be connected to the Load bus while the permanent generator is connected to the Load bus.

B. Enclosures:
1. Surface mount, NEMA 3R rain-tight, aluminum enclosure.
   a. Pad-lockable front door shall include a hinged access plate at the bottom for entry of cables from portable generator. NEMA 3R integrity shall be maintained with access plate open for cable entry.
2. Stainless steel corrosion resistant legs shall be provided for pad mounting of the docking station.
3. Finishes:
   a. Paint after fabrication. Powder coated Hammer Gray.

C. Phase, Neutral, and Ground Buses:
1. Material: Silver or Tin plated, hard-drawn copper.
2. Equipment Ground Bus: bonded to box.
3. Isolated Ground Bus: insulated from box.
4. Ground Bus: 25% of phase size.
5. Neutral Bus: Neutral bus rated 100 percent of phase bus.
6. Round edges on bus.

D. Portable generator connectors shall be Camlok style mounted on 45° angle plate or on gland plate (male for the portable generator and female for the portable load bank.)

E. Provide a manual transfer switch to connect the automatic transfer switch generator start circuit to the portable generator.

F. Docking station shall be equipped with a phase rotation monitor.

G. Docking station shall be equipped with two-wire auto start, battery charger receptacle, and block heater receptacle.

H. Permanent generator connectors shall be broad range set-screw type, located behind an aluminum barrier.

I. Voltage & Phase shall be as shown on project one line drawing. Camloks shall be color coded as appropriate for the specified voltage.

J. Amperage rating shall be as shown on project one line drawing.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine elements and surfaces to receive Generator Docking Station for compliance with installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Surface, Flush or Base Mounted: Specified with order.
   1. Install anchor bolts to elevations required for proper attachment to Generator Docking Station.

B. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from enclosures and components.

3.3 FIELD QUALITY CONTROL

A. Third Party Tests and Inspections to include the following:
   1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
   2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
   3. Perform the following infrared scan tests and inspections and prepare reports:
      a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each Generator Docking Station. Remove front panels so joints and connections are accessible to portable scanner.

B. Generator Docking Station will be considered defective if they do not pass tests and inspections.

C. Prepare test and inspection reports, including a certified report that identifies Generator Docking Station and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

END OF SECTION