Electrical Tapbox Specification Document

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Electrical Tapbox Specifications
- B. Related Sections:
 - 1. Division 00 Bidding Requirements
 - 2. Division 01 General Requirements
 - 3. Section 26 00 00 Electrical: Basic Requirements

1.2 QUALITY ASSURANCE

- A. Referenced Standards:
 - 1. Underwriters Laboratories, Inc.
 - a. UL 50

1.3 QUALIFICATIONS

A. Electrical tapbox manufacturer shall provide a complete factory assembled and tested unit

1.4 SUBMITTALS

- A. Shop Drawings
 - 1. Product technical data:
 - a. Product dimensions with front and side elevation views
 - b. Enclosure type
 - c. Connection details
 - d. Assembly ratings including amperage and voltage

1.5 WARRANTY

- A. Factory Warranty
 - 1. Electrical Tapbox shall be covered by a manufacturer's warranty for a period of one (1) year from date of shipment from the manufacturer.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Power Assemblies LLC.
- B. No Substitutions

2.2 ELECTRICAL TAPBOX

A. GENERAL

- 1. Electrical Tapbox is defined as busbar with mechanical connections, dielectric standoff insulators and grounding terminals enclosed within a padlockable enclosure.
- 2. In the event the Contractor is furnishing the tapbox, the Contractor shall be responsible for the equipment until it has been installed, inspected, tested and accepted in accordance with the requirements of the specifications.

3. Electrical Tapbox shall be PowerTEK™ Series as manufactured by Power Assemblies LLC.

B. CONSTRUCTION

- 1. All equipment shall be new.
- 2. Generator Docking Station enclosure shall be NEMA Type 4/12 or NEMA 4X 304SS
 - a. Unit shall be constructed of 0.075" carbon steel or stainless steel, seamless, continuously welded, and ground smooth. Enclosure will have a flange trough collar around all sides of door opening(s).
 - b. Enclosure will have mounting holes in back of enclosure for wall mounting and mounting hardware with sealing washers and hole plugs shall be included.
 - c. Padmount units of 3000A or more will have appropriate mounting.
 - d. Unit will have stainless steel concealed hinges with removable and interchangeable door(s) capability, padlocking handles, 3-point latching mechanisms on all forward facing doors, removable print pocket, oil & water resistant gasketing and will include ground stud on door(s) and body for grounding.
 - e. Bus bar shall be copper 1/4" bus and shall be provided for each phase in the appropriate configuration to support required amperage and provided for neutral if required.
 - f. Mechanical lugs connectors allow for copper or aluminum conductors and should be torqued to the specified allowance as posted at the terminal.
 - g. The ground bar will accommodate an adequate number of connections to satisfy the maximum number of taps the amperage should allow.
- 3. ANSI-61 gray powder coating inside and out.
- 4. Sub-panels may be powder coated white or bare aluminum.

C. ENCLOSURE

- 1. Mount: Wall Mount (400A-2000A) or Padmount (3000A)
- 2. Material: Carbon Steel or Stainless Steel
- 3. Finish: ANSI 61 Gray
- 4. Additional Requirements
 - a. NEMA Type 4/12
 - b. UL 50 Listed Enclosure Type 4/12 or 4X
 - c. IEC 60529 IP 66

PART 3 – EXECUTION

3.1 INSTALLATION

A. Procedures for Installation

- 1. Prior to installation of electrical tapbox units, Contractor shall examine the areas and conditions under which the tapbox is to be installed and notify the Engineer in writing if unsatisfactory conditions exist.
- 2. The Electrical Tapbox shall be installed as shown on the drawings. In addition, the installation shall:
 - a. Meet the requirements of local codes, the National Electrical Code and National Electrical Contractors Association's "Standard of Installation."

- b. Use copper or aluminum wire conductors for all field wiring.
- c. All terminations must be torqued according to the label provided.