

STATEMENT OF WORK (SOW)

Title of Project: Generator External Connection Project

Scope of Work: Contractor to provide as part of the firm-fixed price Contract/PO all labor, equipment, tools, materials, parts, supplies, supervision, and any other items and services necessary to accomplish the installation and service described herein. Contractor shall follow the VA Technical Info Library (TIL), Section 01 00 00 General Requirements.

Provide and install a new TripleSwitch manufactured by ESL Power Systems, Inc., or equivalent that is compatible with the current configuration, a GE THKS & THKSS, VERSA TRIP LI, 400 -1200AMP Main Switchgear and a Caterpillar Generator model #D348, 620kW, 933 Amp, Serial Number 59BH3378. Installation shall be provided by a licensed electrician, externally mounted to Bldg. 90, approximately 5 feet to the right of the north entry door. The final installation shall allow a portable generator to be connected to our Emergency Distribution System and Generator (in case of hospital generator failure and/or load bank testing). The final Contractor-provided installation shall provide an instant method of transferring power from a portable, externally-provided generator to the hospital's Emergency Distribution System, hence bypassing the permanently affixed hospital generator. Additionally, it will provide a means for load bank testing of the hospital's permanent generator. Contractor shall provide complete Operation & Maintenance Manuals, 3 sets which shall include:

- 1) Construction Drawings
- 2) Materials / Components list including parts numbers
- 3) Maintenance, service requirements and methods

The TripleSwitch, or equivalent, shall meet all applicable NEC standards. As an example, a warning label shall be permanently attached to the enclosure, as required by NEC Art. 520-53k3. This label shall specify the proper sequence for connection and removal of cable connectors. The TripleSwitch, or equivalent, shall be tested via manufacturer's guidelines and code requirements. The TripleSwitch, or equivalent, shall include, at a minimum, a complete factory-assembled, wired, and tested manual transfer switch. The TripleSwitch, or equivalent, shall include three mechanically-interlocked molded case circuit breakers or switches, grounding terminations, internal cam-style receptacles and a neutral connection point. All enclosures shall be Type 3R, constructed of continuous seam welded, powder coated CRS. Access shall be through an interlocked, hinged door that extends the full length of the enclosure. Enclosures shall be powder coated after fabrication, all phase cam-style receptacles within the enclosure shall be factory-wired to UL listed molded case circuit breaker or

switch rated equal to or greater than feeder breaker trip rating. The ground cam-style receptacle shall be provided for connection of the facility ground conductor.

Contractor shall provide UL listed applicable Hubs for this application, as manufactured by Myers or T&B, for each conduit entry on the manual transfer switch. The TripleSwitch, or equivalent, manual transfer switch interlocking mechanism shall be integrated with the access door. The mechanism shall prevent connections from being energized unless the access door is closed.

Contractor to provide and install conduit (and appropriate sized cabling) entry through the top or back of the enclosure, and then routed through a properly flashed/sealed vertical wall penetration adjacent to the enclosure. From the interior penetration, the conduit shall be routed to the interior generator and main switchgear, approximately 25 total linear feet. Service connection shall be through conduit (provide and installed by the contractor) to lugs on the utility breaker and generator.

Prior to installation of the TripleSwitch, or equivalent, the contractor shall examine the area and conditions under which the manual switch is to be installed. The TripleSwitch, or equivalent, shall be installed per the manufactures' instructions. In addition, the installation shall meet the requirements of local codes, the NEC and the National Electrical Contractors Association's "Standards of Installation."