

# **SECTION 16615 - EMERGENCY POWER SUPPLY**

## **PART 1 - GENERAL**

### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

### **1.2 SECTION INCLUDES**

- A. Emergency power supply.

### **1.3 REFERENCES**

- A. NFPA 70 - National Electrical Code.
- B. NFPA 110A - Stored Electrical Energy Emergency and Standby Power Systems.

### **1.4 SUBMITTALS**

- A. Submit under provisions of Section 16010.
- B. Product Data: Provide catalog and data sheets showing electrical characteristics and connection requirements. Include unit ratings, dimensions, and finishes. Include performance data for batteries.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of Product.
- D. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

### **1.5 OPERATION AND MAINTENANCE DATA**

- A. Submit under provisions of Section 16010.
- B. Maintenance Data: Include battery maintenance and unit testing procedures.

### **1.6 QUALITY ASSURANCE**

- A. Perform Work in accordance with NFPA 110A.

## 1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience, and with service facilities within 100 miles of Project.

## 1.8 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Furnish Products listed and classified by Underwriters Laboratories or testing firm acceptable to authority having jurisdiction as suitable for purpose specified and indicated.

## **PART 2 - PRODUCTS**

### 2.1 MANUFACTURERS

- A. Basis of Design: Lithonia, Model ELV-LCFT-3000-120/120 12HR OCB (4-20A/1P). Equipment as manufactured by Chloride or Dual-lite and conforming to those specifications shall be considered equal.

### 2.2 EMERGENCY POWER SUPPLY

- A. Description: Stored energy "Fast Transfer" emergency power supply system designed for Level 2 applications and consisting of rectifier/charger unit, storage batteries, and solid state inverter with static transfer switch, in one enclosure. Unit shall operate HID lighting loads without loss of illumination during power outage for 90 minutes at full rated output power.
- B. Enclosure: NEMA 1, indoor.

### 2.3 RATINGS

- A. Input Voltage: 208 volts, 60 Hz, single phase.
- B. Output Power: Minimum 3000 VA (-.75 to .9 power factor).
- C. Output Voltage: 120 volts + 5 percent, single phase.
- D. Inverter Output Frequency: 60 Hz + .05 percent.
- E. Efficiency: 90 percent minimum.
- F. Maximum Recharge Time: 24 hours following 1.5 hour discharge.
- G. Total Harmonic Distortion: Maximum 5 percent at full load.

H. Battery: Sealed lead calcium, maintenance free type batteries.

2.4 ACCESSORIES:

A. Input circuit breaker.

B. Output circuit breakers (Four (4) @ 20A each).

C. Instrumentation: NFPA 110A.

D. Charger: Dual rate, automatic solid state charger, designed to maintain battery in full-charge condition during normal conditions.

**PART 3 - EXECUTION**

3.1 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install units plumb and level.

3.2 FIELD QUALITY CONTROL

A. Verify operation of each unit by simulating outage.

3.3 DEMONSTRATION

A. Demonstrate normal operation of unit.

**END OF SECTION 16615**