

SECTION 16262

CENTRAL BATTERY - EMERGENCY POWER SUPPLIES

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes small emergency power supplies (generally under 10 kva) with integral battery and inverter, suitable for supplying incandescent, fluorescent and HID lighting, small motors, unit equipment, and control systems.

1.2 REFERENCES

- A. NFPA 110A (National Fire Protection Association) – Stored Electrical Energy emergency and Standby Power Systems.

1.3 SUBMITTALS:

- A. Product Data: Submit catalog and data sheets showing electrical characteristics and connection requirements. Include unit ratings, dimensions, and finishes. Include performance data for batteries.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Submit battery maintenance and unit testing procedures.
- B. Section 01700 – Closeout and Turnover Procedures

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with NFPA 110A
- B. Maintain a copy of document on site.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience and with service facilities with 100 miles of project.

1.7 WARRANTY

- A. Provide two years manufacturer warranty for batteries.

## PART 2 - PRODUCTS

### 2.1 EMERGENCY POWER SUPPLY

#### A. Manufacturers

1. Big Beam Emergency System, Inc.
2. Reliance Electric
3. Federal Signal Corp.
4. Substitutions: Or approved equal as determined by Architect/Engineer/Owner

B. Product Description: NFPA 110A, Class 1.5 stored emergency power supply system designed for Level one (1) applications and consisting of rectifier/charger units, storage battery, and solid state inverter with mechanical or static transfer switch, in one or several enclosures. Unit suitable of operating HID lamps without extinguishing lamp on transfer.

C. Input Voltage: (120) (277) (\_\_\_\_\_) volts, 60 Hz, single phase.

D. Output Power (\_\_\_\_\_) VA at 0.8 power factor.

E. Output Voltage: (120) (277) (\_\_\_\_\_) volts + (5) (\_\_\_\_\_) percent, single phase.

F. Inverter Output Frequency: (60) (\_\_\_\_\_) Hz + (1) (\_\_\_\_\_) percent

G. Efficiency: 90 percent minimum.

H. Maximum recharge Time: (12) (\_\_\_\_\_) hours following (1.5) (\_\_\_\_\_) hour discharge.

I. Total Harmonic Distortion: Less than (10) (\_\_\_\_\_) percent at full resistive load.

J. Battery: (Lead calcium) (\_\_\_\_\_) sealed type battery.

K. Charger: Dual rate, designed to maintain battery in full-charge condition during normal conditions.

L. Furnish remote trouble monitor in (flush-mounted) (surface-mounted) enclosure with manufacture's standard finish.

M. Accessories: (Metering) (Provisions for remote battery alarm) (\_\_\_\_\_)

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install units plumb and level and in accordance with NEC

3.2 FIELD QUALITY CONTROL

- A. Verify operation of each unit by simulating outage.

3.3 DEMONSTATION AND TRAINING

- A. Demonstrate normal operation of unit.

END OF SECTION