1 Modes of Operation

1.1 The UPS (Static Uninterruptible Power Supply) shall be designed to operate as an online reverse transfer system in the following modes:

1.1.1 Normal: The UPS inverter continuously supplies the critical AC load. The rectifier/charger derives power from the normal AC source and supplied DC power to the inverter while simultaneously float-charging a power reserve battery.

1.1.2 Emergency: Upon failure of the normal AC power, the critical AC load is supplied by the inverter, which, without any switching, obtains power from the battery. There shall be no interruption in power to the critical load upon failure or restoration of the normal AC source.

1.1.3 Recharge: Upon restoration of normal AC power (after a normal AC power outage) the rectifier/charger shall automatically restart, walk-in, and gradually assume the inverter and battery recharge loads.

1.1.4 Bypass: If the UPS must be taken out of service for maintenance or repair, or should the inverter overload capacity be exceeded, the static transfer switch shall perform a reverse transfer of the load from the inverter to the bypass source with no interruption in power to the critical AC load.

2 Applications

2.1 Emergency Egress Lighting – Controlled Power Company Model ELU.