**Alternative Power Source Recommendations for Customer Equipment for Service Assurance**

**tw telecom** implements many standards to provide the greatest service reliability to customers. One of our requirements includes backup service equipment for continuous operation in the event of an equipment or system failure. This practice not only includes redundancy within our network, but also in the systems that power it.

While **tw telecom** provides backup systems for some services, it’s becoming increasingly important for customers to install a reliable power source on premise for increased safety and reliability. If the customer equipment, such as routers, switches, servers and even PBX systems, do not have reliable back-up power systems, then the customer will lose their connection to the **tw telecom** network for all services—voice, data and Internet.

**tw telecom** strongly encourages each customer to evaluate their telecommunications systems and reliability requirements. We also suggest the following options for back-up power for customer-owned equipment:

- For telecommunications and supporting equipment using AC power, a UPS (uninterruptible power supply) is a good, economical choice for protecting against nuisance outages (typically less than 15 minutes). The UPS quickly becomes cost prohibitive as situations require larger power requirements and/or longer reserve times.

- As more companies seek improved DC power reliability, many equipment manufacturers are offering the option of DC-powered equipment. The DC-power option will offer a longer reserve time (several hours to days) than the UPS solution. TWTC uses DC power when installing equipment at customer locations and ensures a minimum eight hour battery reserve.

- An emergency engine alternator (generator) provides AC power and offers the most robust solution in case of a commercial power outage. This, in combination with a UPS or DC power, will provide uninterrupted power to essential telecommunication equipment.

Please note that there may be unique code requirements or restrictions in a municipality, such as New York City, that do not allow generators within buildings.

Because individual needs may vary, please contact your local **tw telecom** office or your equipment vendor for assistance if you have questions about power requirements or other needs specific to providing back-up power for your service.