

Power Profile

proactive approach to power outage



Most laboratory buildings experience occasional brief periods of power loss. Such instances may be minor disturbances or could damage equipment or ruin experimentation. Longer-term power outages may cause significant disruption and loss. It is prudent to consider the effects of long-term and short-term power loss and implement plans to minimize negative outcomes.

Damaged power distribution systems and other conditions may result in power loss that lasts hours or days. This has implications for security, safety, and experimental work that go well beyond those for a short-term power loss.

Security Issues: Power failure impacts electronic locks, disrupts ordinary communication and stretches personnel monitoring systems to the limit.

Environmental and Storage Conditions: The most common problem during a power outage is storage of materials that require specialized environmental conditions, such as refrigeration and humidity controls.

Discontinuation of Experiments: Experiments that rely on power may have to be discontinued and disassembled. Leaving the materials in place may not be prudent. Problem situations in the laboratory must

be identified so that they may be properly managed in the event of an emergency.

Generator Power: Limited generator power is available in the event of power failure. It is important to know what will continue to run during a power loss. There is usually a slight delay from the time the power is lost to the time that the power load is taken up by the generator. Equipment that is sensitive to a minor power disruption may be affected and generator power may not be the right solution. Only equipment connected to the emergency power outlets will run during a power outage, and each



PSE&G crews in NJ work on restoring power as flames from a ruptured gas main shoot high into the air. A bolt of lightning from a strong thunderstorm hit the utility pole bringing down a power line. The electricity arced to the gas pipe and ignited it.

circuit has a maximum capacity, so it is critical to know the total load for each room/outlet.



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Whether the power outage is planned or unexpected, it is important to consider how it will affect laboratory operations, and how critical operations can be maintained. A **Laboratory Power Profile** has been developed to collect information about the power needs of each laboratory, addressing the issues mentioned above. It captures data about the emergency power receptacles, unattended equipment, power load of critical equipment, alarms and known problems. This fillable form will populate a database offering ready access in the event of an emergency. The **Laboratory Power Profile** will be verified by a walk-through, to ensure accuracy and the best possible service in the event of power loss. Please complete the **Profile** in as much detail as possible and email the completed form to eospecialists@verizon.net.