

# PureWave UPS System Provides a “Shot in the Arm” to Pharmaceutical Manufacturer

## Background

A pharmaceutical manufacturer located in Maryland was experiencing frequent power disruptions during the summer storm season, when demand for their vaccines is highest. The facilities are served by a long overhead distribution feeder that is subject to voltage sags and momentary interruptions from tree branches and animal intrusions . . . not only on that feeder but adjacent feeders as well.

The vaccine production process can take up to eight weeks to complete and involves a number of very precisely controlled steps, the most critical of which is incubation. The temperature of the incubator must be held constant for a specific period to ensure that the virus is completely killed and not “damaged.”

But the power problems were causing incubator equipment to shut down. Since the equipment often would not restart automatically, this critical production step could be jeopardized. On some occasions, entire batches of vaccine had to be rejected, resulting in millions of dollars of financial loss.

## Examining the options

Facility’s engineers had planned only to upgrade their standby generator capacity until S&C demonstrated how the PureWave UPS System alone can protect the *entire facility* from over 98% of the power quality problems they were experiencing. And, when combined with a backup generator, the system provides 100% power protection.

Furthermore, only the PureWave UPS System can be installed outdoors . . . eliminating the need to build a costly air-conditioned building addition.

## What did they do?

The pharmaceutical manufacturer purchased a 2200-kVA PureWave UPS System along with a backup generator. The UPS system was installed in two weeks and commissioned in three days!

Through careful planning and coordination—and use of the integral bypass feature of the PureWave UPS System—only a four-hour outage was needed to cut over to the new system. (Had an external bypass feature been specified, no outage would have been necessary.)



**S&C ELECTRIC COMPANY**

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## Results

Within two months of commissioning, the PureWave UPS System protected the facilities from over a dozen power disturbances and the total installed cost was paid back! The system has operated over 60 times in its first six months, providing millions of dollars of increased production by allowing the facility to operate at maximum production levels.

The PureWave UPS System reacts quickly to power disturbances. It transfers from the utility source to battery power in 2 to 4 milliseconds typically . . . fast

enough to prevent costly production losses. The PureWave UPS System provides enough energy for 60 seconds of backup power at full load. It seamlessly transfers the load to the emergency generator during longer utility outages and back to the utility source when power is restored.

The PureWave UPS System has room to grow too. An additional 250-kVA energy module can be quickly and easily added at any time, should a facility expansion be needed.

