

Luckily Rob had his own Eaton brand of UPS. He came in and installed it and ever since, we have never again had (an) issue here.

David Ryan, plant manager

Eaton's stellar service comes through for Praxair

Location:

Chatham, Ontario, Canada

Segment:

Manufacturing

Problem:

For years, the manufacturing plant had experienced unexpected, sudden shutdowns, but could not pinpoint the source until an Eaton® service representative came on-site.

Solution:

Eaton® 9130 UPS, Eaton Service

Results:

An Eaton service technician not only identified the culprit behind the plant shutdowns, but also delivered a solution to remedy them, and now provides ongoing support.

Background

Praxair, Inc., a Fortune 250 company, is the largest industrial gases company in North and South America and one of the largest worldwide. The company produces, sells and distributes atmospheric, process and specialty gases, as well as high-performance surface coatings. With its products, services and technologies, Praxair strives to make the planet more productive by bringing efficiency and environmental benefits to a wide variety of industries, including aerospace, chemicals, food and beverage, electronics, energy, healthcare, manufacturing, metals and many others.

Challenge

For many years, Praxair Canada was haunted by a ghost in its electrical system, which would cause nuisance plant shutdowns on a regular basis. Logged as a "Non-PLC shutdown event," officials could never locate the source of the problem.

"The error message means that something made the starter on a motor drop out," explains David Ryan, plant manager for the Ontario site. "But there are multiple reasons that could happen and we could never figure out why."

The devastating result was a complete plant outage — every time. "Absolutely everything would shut down," Ryan reveals, noting that the routine blackouts not only impacted plant operations but were taking a toll on equipment and machinery. "We went through all sorts of shutdown sequences to try to identify the problem," he adds, including installing a power meter on site. But the measure was to no avail, as the ghost continued to haunt the plant.



Powering Business Worldwide

Hunting the ghost

Approximately six months ago, Praxair finally got a lucky break. When the firm's regular service company was unexpectedly unable to complete a required electrical inspection, Ryan called an Eaton customer service engineer, Robert Chwiecko, whom he had met previously at another facility.

"Due to customer demand, we can't just shut down the plant on a whim," Ryan explains. "We had an open electrical inspection time slot but when our regular provider couldn't do the inspection at the last minute, I gave Rob a call and he came through for me and did a great job."

While Chwiecko was there, Ryan decided to seize the opportunity, and asked for his help pinpointing Praxair's long-standing shutdown problem. "My thought at the time was that maybe the grid was having power issues, voltage spikes or sags, or harmonic imbalances," Ryan shares.

But Chwiecko had another culprit in mind. "I found that their 'cookie cutter' plant design specified the use of the APC SmartUPS uninterruptible power system (UPS) to supply control power to the PLC rack," the service technician recalls. "During my investigation, I speculated that the 'ghost' fault was being caused by a transient that occurred during the switching cycle, when the UPS transfers from utility-to-battery, as well as in reverse."

Chwiecko's ghost-busting capabilities proved to be right on the mark: the shutdown issue was indeed traced back to a problem with Praxair's APC UPS.

At the heart of the matter was a self-testing setting in the UPS, which activated every two weeks, contributing to the frequency of the outages. The only way to disable the setting, Ryan says, was to purchase an upgraded software program. There was no way to change on the setting on the UPS or with its included software.

The bottom line? "It just wasn't able to support our PLC and keep it running," Ryan says of the APC unit.

But Chwiecko had the perfect solution at hand.

"Luckily Rob had his own Eaton brand of UPS," Ryan recalls. "He came in and installed it and ever since, we have never again had a non-PLC issue here."

Solution

Indeed, Praxair has enjoyed nothing but continuous uptime and uncompromised reliability since the Eaton 9130 tower UPS was installed at the Chatham facility. Supporting four 800-horsepower motors and the site's programmable logic controller (PLC) — "the brain of our plant," according to Ryan — the unit protects against downtime, data loss and process interruption by delivering continuous clean power.

"Even after intentional disruptions in utility power, the plant stays running," Chwiecko adds. "The Chatham plant has not tripped since!"

Praxair's Chatham plant isn't the only facility that has benefitted from the installation of the 9130. After Ryan posted details about the problem the site was experiencing on the company's internal global communication network, several other plant managers echoed the same issues.

"Not only did this solution help us out, but we found out that the same problem was occurring in many company sites across North America and in Mexico," Ryan reveals.

Since then, several sites have replaced the APC units with Eaton 9130 UPSs and have experienced the same results: continuous uptime and zero system shutdowns. As a result, Praxair is planning to standardize on the Eaton 9130 UPS company-wide.

Exemplary Service

While Eaton's resolution of the shutdown problem was a huge victory for Praxair, the company discovered numerous advantages from the Eaton service technician.

Recognized industry-wide for having the most professional, technically skilled field technicians, Eaton offers the utmost flexibility, with a comprehensive range of services plans to meet the varied needs of customers. Even more, immediate access to an enormous inventory of parts, coupled with 24x7 support, help organizations ensure high availability at all times.

"Rob found a couple other wiring issues with the APC UPS," Ryan points out, "and he also found things that our other service provider had never uncovered in any past inspection."

For example, the plant's motor heaters had never been properly wired. "And that's a big deal," Ryan emphasizes.

Praxair also lauds the proficiency of the service technician. "He is very professional," Ryan emphasizes. "Plus his reporting is great and he is always on time."

In fact, the company has been so impressed with Eaton that Praxair is now in the process of switching to Eaton as its permanent service provider.

"I'm just so happy we have finally equipment that works and can support us," Ryan enthuses.

Not to mention outstanding, ongoing service. "We can't say enough about Rob," Ryan concludes. "He has saved us a lot of headaches here."

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