



City of Airdrie protected from the devastation of downtime

Location:

Airdrie, Alberta, Canada

Segment:

Government

Challenge:

The City's data centers demanded a UPS solution offering the highest level of reliability, complemented by exceptional service

Solution:

Eaton® 9155, Eaton 9130, Service, Environmental Monitoring Probe, eNotify, EBMs

Results:

Eaton was the clear choice for Airdrie, offering superior service and a comprehensive product line on which the City could standardize.

"Everyone sells products, but when you have a service team that explains the entire process and does everything with such a high level of professionalism, it really stands out."

*Paul Hurst, network engineer
City of Airdrie*

Background

With a population of nearly 59,000, the City of Airdrie is situated 10 minutes north of Calgary on the Queen Elizabeth II Highway. One of the fastest growing communities in Canada, Airdrie offers a wide range of housing options in both new and established neighborhoods, facilitating a small town lifestyle with big city amenities.

Challenge

Safeguarding vital city functions against the pitfalls and potential devastation of downtime was the primary goal behind the City of Airdrie's selection of a power protection solution for its two data center facilities. Yet in addition to deploying uninterruptible power supplies (UPSs) with the highest level of reliability, the City also sought an experienced, professional service team that would ensure the units always operated optimally. Furthermore, the City wished to standardize on a single, trusted manufacturer, and also desired extensive monitoring capabilities for its environment.

Solution

Answering the City's quest for continuous uptime was the Eaton® 9155 UPS, backed by an Eaton service plan that includes regular preventive maintenance. The City deployed three units, the first of which protects its primary data center that is responsible for the administration of the municipality, including all email, files and applications. Another unit was installed in the City's secondary data center, which maintains a copy of the primary facility, as well as various split services and essential phone services including the 911 dispatch. Finally, the third 9155 supports the City's IT services, including computer systems and the wireless platform.

"The units play a significant role in our calculated uptime," emphasizes Paul Hurst, network engineer for the City of Airdrie. "We've seen a lot of other UPS manufacturers claim to have excellent quality, but the units always seem to fail. You expect batteries to eventually fail," Hurst acknowledges, "but some of our failures in the past were on key components, causing catastrophic failures. But that has never been our experience with Eaton."



Powering Business Worldwide

Indeed, the 9155's online design supplies continuous, clean power to the connected load while protecting against all nine of the most common power problems. Available in 8, 10, 12 and 15 kVA models, the unit offers a 0.9 output power factor, which delivers more power than the vast majority of competitors' models and enables the 9155 to power more equipment than other UPSs of equivalent VA rating.

Having installed its first 9155 in 2006, the second two years later and the final unit this year, the City of Airdrie has experienced nothing short of 100 percent uptime. "It's just a different spectrum with Eaton compared to the other products we've used," Hurst notes.

The network engineer has been extremely impressed with several of the 9155's features, including the option of bolstering runtime with extended battery modules (EBMs). In addition, Hurst appreciates the unit's maintenance bypass module, which further enhances reliability by enabling UPS maintenance or service without having to shut down the load. Also earning rave review is the 9155's small footprint.

"It's a very thin tower so it doesn't occupy a lot of vertical space," he explains. "Space is always an issue inside a data center."

Even more, Hurst says the 9155's on-screen display is far more intuitive than products from other vendors. "With a few button touches, we know everything we need to know about what's happening with that unit," he reveals. "With other UPSs, it was almost like a maze. You needed a flow chart just to get the information you wanted."

However, by far the most beneficial aspect of selecting Eaton has been the preventive maintenance plan, according to Hurst.

"We have quarterly inspections to examine the performance of our units," he says. "We always know whether we need to scale out or if our capacity is sufficient, when it's time to replace batteries, or if any other actions are needed."

Hurst not only values receiving a regular snapshot of the overall health of his UPSs, but also applauds the expertise and professionalism demonstrated by Eaton's service technicians.

"I have watched them perform service many times, and it is always done in a very efficient manner," he points out. "Everyone sells products, but when you have a service team that explains the entire process and does everything with such a high level of professionalism, it really stands out."

The City of Airdrie is so confident in both the product and service offering from Eaton that the municipality has opted to standardize on the brand for all of its power protection needs.

"I don't want to manage a bunch of different companies, or from a security standpoint, have to vet multiple service technicians so they can come in and out of our environment," Hurst explains. "Plus I have peace of mind on the knowledge transfer. When I'm not here, personnel can log in remotely to all of the Eaton UPSs with no additional training. It's very intuitive with Eaton."

In addition, the move toward product standardization enhances flexibility for the City. "For example, our two data centers are mission critical, and if we ever need batteries for one of those two 9155 units, we can take them from the third 9155, which is less critical," Hurst points out. "We like the flexibility of being able to interchange parts if we need to."

The City has also bolstered monitoring capabilities with network cards and the Eaton Environmental Monitoring Probe (EMP), which enables users to easily and remotely monitor environmental conditions.

"It sends us event alerts if there is any change in power, temperature or humidity," Hurst says.

Furthermore, the City of Airdrie is preparing to utilize Eaton's eNotify Remote Monitoring, which features 24x7 real-time monitoring of UPS and battery systems by trained Eaton product technicians. The solution helps identify potential problems before they become load loss events, saving money, increasing power reliability and reducing downtime. eNotify also collects performance data and sends status messages to Eaton's Remote Monitoring Command Center, evaluating UPS health by comparing current and historical performance data with specified parameters. Monthly e-mail reports detail UPS performance and alarm history, enabling more informed management decisions.

"With eNotify, we can have our major data center be monitored 24/7," Hurst explains. "We would still get notifications, but it just adds another layer. It is especially advantageous to us as we bring on new buildings and our environment grows to more than one person can manage."

Furthermore, the City of Airdrie has been so impressed with its 9155 units that it is now replacing other less critical UPSs with the Eaton 9130 unit. With smaller UPSs spread throughout the municipality — tasked with protecting equipment ranging from security cameras to switches — the City has encountered numerous issues with models from the other manufacturers, including a power spike a few months back that destroyed an \$18,000 piece of connected switch gear equipment.

"We put consumer-grade UPSs in and have ended up replacing them two, three, even four times," Hurst reveals. "We not only had equipment damage but many outright failures on the units."

As each of the devices fail, the City has been upgrading it with an Eaton 9130, which not only has proven to be far superior in performance, but also more cost-effective.

"We lost power the other day and I guarantee the other manufacturer's unit would have failed, but the 9130 didn't," Hurst reports. "The 9130 UPSs don't cost any more than the previous models we were purchasing, and they even include a network management card."

Even more, "the units are fast to deploy," Hurst says. "You take it out of the box and you're done. And you know it's going to work!"

Results

With the Eaton solution in place, the City of Airdrie no longer has to worry about the dependability of its power protection solution. "I don't have to stress about anything when it comes to Eaton," Hurst sums up.

Indeed, the City is now able to:

- Ensure continuous uptime to its critical data center equipment with the Eaton 9155
- Preserve the ongoing health of all of its units with an Eaton service plan
- Further bolster high availability with the 9155's maintenance bypass
- Gain superior, cost-effective power protection with the Eaton 9130
- Stay apprised of all power conditions with Eaton's eNotify monitoring
- Keep a constant pulse on environmental conditions with the Environmental Monitoring Probe

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