



CASE STUDY

9900B Series UPS

ViaWest | Denver, Colorado

Quality Engineering



challenge

How do you build a business case for adopting a single UPS system vendor?



solution

First confirm performance and low operating cost through an independent source. Then test your choice hard enough to make competing systems beg for mercy.

Industry Context

Even before the advent of cloud computing, the need to maintain high systems availability and protect ever more sophisticated equipment sparked the explosive growth of the data center industry. Data centers assure businesses and government agencies of security, connectivity, and regulated power without the burden of operating in-house IT facilities. According to a study by Microsoft's Christian Belady, global spending on data center construction will top \$78 billion a year by 2020. By the same year, the U.S. outlay for data center construction (today about \$15 billion a year) could reach \$18 billion.*

ViaWest helps its customers store, manage, and secure their information, with almost half a million square feet of raised flooring across 22 data center locations. While ViaWest maintains some legacy sites based on competing UPS systems, it has adopted Mitsubishi UPS technology as the standard for new construction.

* C Beladi. (2011, March 14). *How Big is the Datacenter Construction Business?* [Web log post].

Retrieved from <http://blogs.technet.com/b/msdatacenters/archive/2011/03/14/how-big-is-the-datacenter-construction-business.aspx>

challenge

Thousands of companies whose survival depends on stable IT environments rely on ViaWest's 22 data centers and 13 network operations centers for rock-solid power delivery. In 2009, after decades of operating experience – and with a growing installed base of 100-plus UPS systems from five manufacturers – the operations team set a goal: Maximize ROI, boost reliability, and increase efficiency with a single-manufacturer UPS standard for all new construction. It would be a significant decision. Hard evidence would be required.



“Customers evaluate us in terms of PUE – power utilization effectiveness – and we constantly strive to lower it. But reliability is our business, what people come to us for in the first place. With Mitsubishi, we found the convergence of lowest power consumption and highest availability.”

– **Todd Gale, Director of Engineering and Construction, ViaWest**

solution

“We’d experienced a few incidents that shook our confidence in some of our vendors,” says ViaWest Director of Engineering and Construction Todd Gale. “We had to find something better.”

“We did a comprehensive evaluation of everything on the market, based on published data and our operational experience. Even commissioned a third-party study comparing energy costs for the leading manufacturers. Based on price, performance, reliability, customer service, commitment, engineering support, senior management support... it became clear Mitsubishi was the leader. And they’ve never disappointed us.”

“Here’s one example: Right after we chose Mitsubishi, we ordered a Model 9900B for one of our Colorado data centers. Our engineers had instructions to configure the system for a standard 750 kW load-bank test. With the Mitsubishi representative standing by, we gave it 25 percent of the rated load. Watching the displays, we could see it looked good. Now up to 50 percent. Still good. Seventy-five percent, still good. A hundred percent, still good. No sweat. We were pleased — I think there were a couple of fist bumps.”

“Then the Mitsubishi rep spoke up. ‘Hold on. Something’s not right. Look at this!’”

“It took us a second to get what he meant. There it was — an error in the configuration. Instead of the rated high of 750 kW, the system had been taking 1,000 kW — a 33 percent overload. Running cool, no hot spots. It was amazing. My impression was it could’ve run that way for 10 years. Any other system would have been on fire.”

“Now, that’s quality engineering.”

About ViaWest

ViaWest is one of the largest privately held data center service providers in North America. They provide colocation, complex hosting, cloud, and managed services to businesses of all sizes nationwide. ViaWest owns and operates 22 enterprise-class data centers in Colorado, Texas, Oregon, Utah, and Nevada, delivering high-quality, flexible solutions designed to support each customer's unique business needs.

ViaWest has achieved PCI DSS Sections 9 and 12 compliance for specific data center locations, and has also obtained a dual-standard Service Organizations Controls 1 (SOC 1) Type 2 report. The audit for this report is conducted in accordance with the Statement on Standards for Attestation Engagements No. 16 (SSAE 16) and the International Standards for Assurance Engagements No. 3402 (ISAE 3402). ViaWest has also obtained the SysTrust seal for service organizations on the Trust Services Principles and Criteria, also known as an SOC 3 report. ViaWest offers a 100-percent satisfaction guarantee as well as service level agreements for power and network availability, performance, and support response times. Details are posted at www.viawest.com.

About the 9900B Series UPS

Until now, UPS topology selection for mission-critical applications has been a tradeoff between availability and efficiency. Online double-conversion technology was ideal for super-reliable protection, but not as efficient as riskier offline standby designs.

Now Mitsubishi eliminates the element of compromise with the 9900B Series, a true on-line UPS system that operates at high efficiencies, with superior reliability and performance, no matter what the load.

About the UPS Division of Mitsubishi Electric Power Products, Inc. (MEPPI)

Since 1964, Mitsubishi Electric has manufactured precision-engineered, high-quality uninterruptible power supplies to protect its customers' mission-critical equipment during times of power instability. Mitsubishi Electric leads the industry in designing and manufacturing reliable, environmentally friendly UPS systems to extend uptime, prevent data loss, and protect against power surges. The MEPPI UPS Division offers systems in both single- and multi-module configurations, and a broad range of kVA capacities. Visit www.meppi.com for more information.



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