

Hotel Marcel Pioneers Sustainability: Achieving 50% Energy Savings with Digital Electricity<sup>™</sup>



Fault Managed Power Intelligent Buildings

> **Solution** Digital Electricity<sup>™</sup>

### Introduction

CASE STUDY

Hotel Marcel is a pioneer in sustainable hospitality, nestled within the historic Pirelli Tire building in New Haven, Connecticut. Renowned for its brutalist architecture, this landmark now hosts the country's first net-zero hotel powered by innovative Digital Electricity technology.

Hotel Marcel has gained recognition for its commitment to sustainability, boasting a fossil fuel-free operation. It proudly holds the distinction of being the first hotel to achieve Passive House certification, a globally recognized standard for energy efficiency.

Digital Electricity is a crucial component of their impressive energy conservation efforts. This innovative approach enables Hotel Marcel to minimize energy consumption and optimize electricity utilization effectively.

## **Project Overview**

#### The Facility

In 1970, the Pirelli Tire building transitioned from vacancy to the epitome of green hospitality. Since the late 1990s, it remained unoccupied until visionary developers acquired it in 2019. They recognized its potential and embarked on a transformative journey to create Hotel Marcel—a beacon of sustainability and luxury. Despite its historic significance, the building seamlessly integrates modern amenities while preserving its architectural heritage, earning a place on the State and National Registers of Historic Places.

# The Challenge

Revitalizing a historic structure into a net-zero hotel posed multifaceted challenges. Preservation mandates demanded utmost respect for the building's original design while integrating cutting- edge technologies, which required a delicate balance. The renovation necessitated a flexible and discreet electrical and data network, adhering to strict guidelines to maintain the building's integrity.

# The Solution

In collaboration with **Becker + Becker, Sinclair Digital Services (SDS)** spearheaded the infrastructure design and management. They partnered with VoltServer to implement a groundbreaking solution tailored to Hotel Marcel's unique needs. VoltServer's Digital Electricity<sup>™</sup> platform emerged as the cornerstone, enabling discreet power distribution to a network of IoT devices. This innovative approach overcame spatial constraints and

preserved the building's aesthetics, setting a new standard for sustainable retrofitting in historic structures.

Thanks to the implementation of Digital Electricity, Hotel Marcel has achieved remarkable savings, including:

- A 40% reduction in lighting and shades-related energy consumption.
- A 50% decrease in utility bills compared to conventional electricity usage.

Metrics provided by Bruce Redman Becker, Architect & Developer, Owner of Hotel Marcel.

#### IMPLEMENTATION DETAILS

## **Distance Considerations**

Navigating the expansive layout of Hotel Marcel necessitated a meticulous approach to power and data distribution. Traditional methods, such as core drilling and conduit installation, proved invasive and incompatible with the building's design ethos. However, Digital Electricity's ability to transmit power over Class 2 wiring simplified deployment, eliminating the need for disruptive construction. This streamlined approach ensured minimal impact on the building's structure while maximizing efficiency.

## Installation and Training

SDS conducted comprehensive training sessions to equip staff with the knowledge and skills required for seamless integration. Leveraging VoltServer's expertise, they implemented a centralized power and data network that empowered guests to customize their environments easily. Each of the 165 guest rooms and suites boasts a fine level of monitoring and control, enhancing the luxury experience while optimizing energy consumption.



## **Results and Future Expansion**

The implementation of Digital Electricity streamlined operations, reducing project complexity and costs. The centralized power and data network facilitated energy optimization, aligning with Hotel Marcel's commitment to sustainability. Preliminary results indicate significant reductions in energy consumption, paving the way for future expansions and enhancements. As Hotel Marcel continues to evolve, it remains steadfast in its pursuit of environmental stewardship and unparalleled guest experiences.

## Conclusion

Hotel Marcel exemplifies the convergence of luxury hospitality and environmental responsibility. Innovative solutions and strategic partnerships set a precedent for sustainable tourism, inviting guests to indulge in luxury while minimizing their carbon footprint. As the hospitality industry embraces sustainability, Hotel Marcel stands at the forefront, leading by example and inspiring others to follow suit.

To learn more about how Hotel Marcel is a pioneer in sustainability, visit https://www.youtube.com/watch?v=g29jrhlAwDU.

To learn more or schedule a demo, visit **voltserver.com** or call **888-622-8658** 

