CASE STUDY

NYC's Largest Residential EV Charging Network: Hilltop Village Cooperative's Journey with Evoke Systems

Quick Facts

Location: Queens, New York

Scale: 423 Level 2 EV chargers

Facility Type: Multi-building residential cooperative (9 buildings)

Program Affiliation: Con Edison PowerReady program

Status: Completed and operational

Key Partners

Hilltop Village Cooperative (Site)

Con Edison (Utility)

DVM Industries (Implementation)

EVoke Systems (Software Platform)

Technical Highlights

- NYC's largest residential EV charging installation
- Full integration with Con Edison's grid services
- Advanced load management across multiple buildings
- Real-time monitoring and optimization capabilities

Overview

The Hilltop Village Cooperative in Queens, New York, is now home to New York City's largest residential electric vehicle (EV) charging project, thanks to Con Edison's PowerReady program. With the installation of 423 Level 2 EV chargers, this ambitious initiative is a significant step toward reducing carbon emissions and supporting the city's transition to a cleaner, greener energy future. EVoke Systems, a software-only Charge Network Operator, played a critical role in managing and optimizing the Hilltop Village charging infrastructure. Through its sophisticated software platform, EVoke delivered seamless integration, operational efficiency, and a scalable solution tailored to the unique needs of this multiunit development.

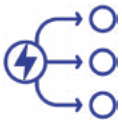
Challenges and Opportunities

The Hilltop Village Cooperative project posed unique challenges:

1. **Complex Infrastructure Coordination**
   With nine buildings requiring electrical upgrades, the project involved extensive coordination across electrical, excavation, engineering, and building management teams.
2. **Future-Proofing EV Infrastructure**
   The charging stations needed to be designed not just for today's EV demand but also for anticipated growth.
3. **Sustainability Goals**
   The project aligned with New York City's ambitious emissions reduction goals, creating a need for software that could optimize energy use while managing grid impact.

Why EVoke Software was the Right Choice

EVoke's software was chosen for this project due to its ability to address key requirements:



Dynamic Load Management
EVoke's SmartCharge Management System (SMS) provided advanced load-balancing capabilities, ensuring the efficient distribution of electricity across all 423 chargers while staying within the building's electrical capacity. The platform dynamically adjusted charging sessions based on grid conditions, Time of Use (TOU) rates, and demand-response signals.

Scalability and Flexibility
Hilltop Village required a solution capable of handling hundreds of chargers across multiple buildings. EVoke's OpenAPIs, developed in collaboration with the Department of Energy, allowed seamless integration with the existing energy infrastructure and ensured compatibility with future expansions.

Energy Cost Savings for Residents
EVoke's software enabled tenants to take advantage of TOU rates and receive financial incentives by participating in demand-response programs. This feature ensured that EV drivers at Hilltop could charge their vehicles affordably, supporting the transition to electric mobility.

Robust Grid Services Integration
Leveraging its Energy Services Exchange (ESX) platform, EVoke aggregated and reported 15-minute load data across Con Edison's network zones. This capability allowed precise coordination with the utility to minimize grid strain and maximize efficiency during peak demand periods.

User-Centric Experience
Through the EVoke mobile app, residents received real-time updates and personalized offers for charging schedules. The app's intuitive interface empowered drivers to choose preferred charging times while benefiting from reduced costs.

Impact

The collaboration between Hilltop Village Cooperative, DVM Industries, Con Edison, and EVoke Systems has resulted in:

1. **Enhanced Charging Infrastructure:** 423 Level 2 chargers now serve as a model for residential EV charging projects nationwide.
2. **Environmental Benefits:** Reduced carbon emissions from EV adoption contribute to New York City's climate goals.
3. **Economic Value:** Evoke's software-driven optimizations lower energy costs for both station operators and drivers.
4. **Future Readiness:** Hilltop Village is now equipped to handle increasing EV demand without the need for costly infrastructure overhauls.

Conclusion

EVoke Systems' software was instrumental in transforming the Hilltop Village Cooperative into a pioneering residential EV charging hub. Its cutting-edge features, including dynamic load management, grid services integration, and user-centric functionality, made it the ideal choice for this complex, large-scale project.

As the adoption of electric vehicles continues to grow, the Hilltop Village project demonstrates how innovative technology, strong partnerships, and bold initiatives can drive the transition to a cleaner and more sustainable energy future.

Contact us:

sales@evokesystems.com

www.evokesystems.com

fuel the shift™