

# Future-Proofing EV Charging in a 27-Story Residential High-Rise



**Park East Tower**  
4909 Laclede Avenue, St. Louis, Missouri

**wevo**

## Property Details

- 89 units | 27 Story Highrise
- 5-story parking garage
- Deeded parking
- Homeowners Association (HOA)

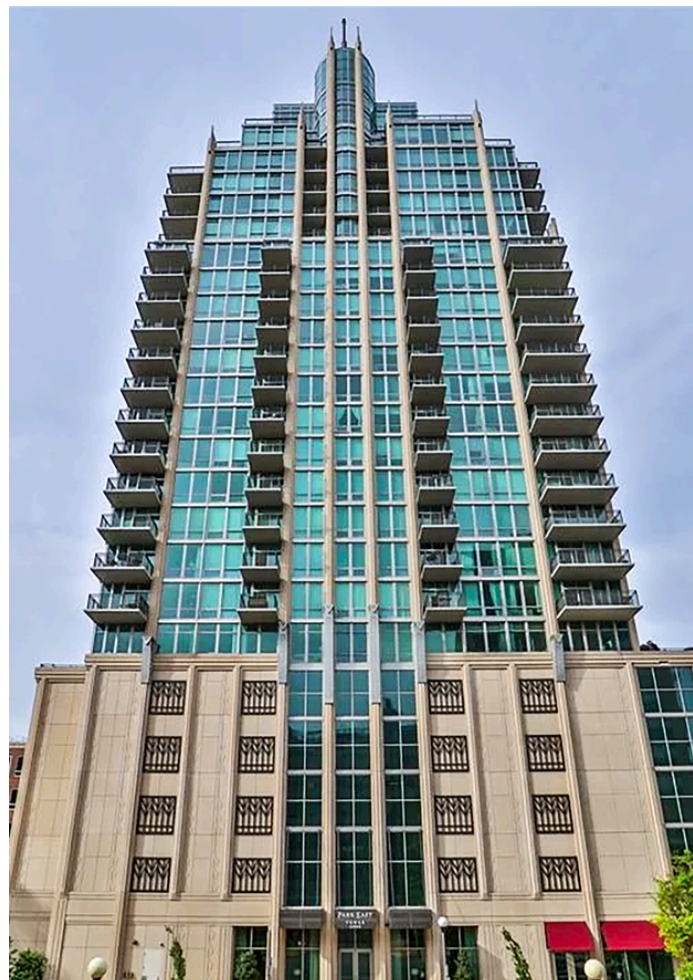
## Background

The site wanted to future proof the installation so that as more residents purchase EVs, they would not have to worry about capacity constraints. As a result, Park East Tower's HOA sought a scalable, future-proof solution. A networked EV charger powered by Wevo's platform which enables load management, billing integration, and HOA reimbursement capabilities.

The building had multiple challenges:

- Electrical capacity constraints – The building's electrical system had limited spare capacity, requiring careful planning to add EV charging.
- Manual billing burden – The HOA treasurer personally read sub-meters and billed EV owners monthly or quarterly.
- Fairness concerns – The board wanted to ensure EV drivers paid only for their usage, without costs being passed to non-EV owning residents.
- Scalability – Any solution had to accommodate phased growth—without expensive infrastructure overhauls.

The HOA formed an EV Charging Committee of EV owners, some who coincidentally had a technical background. The committee worked with an electrical engineering consultant, surveyed residents on their EV adoption timelines, and assessed options.



The survey showed a slow but steady growth in EV demand—just a few new EV owners per year—but the board wanted to prepare for the long-term. Rather than electrifying every parking space upfront, they opted for a phased approach—installing new infrastructure now, then expanding as demand grows.

The HOA, with guidance from their consultant, developed a vendor checklist of 40 criteria covering everything from scalability and load balancing to billing automation, resident support, and integration with the building's electrical system.



## Technology Solution:

Networked level 2 chargers and Wevo's automated electric vehicle (EV) charging management with load balancing, resident billing, and HOA reimbursement.

- Installed new electrical panels on the 4th floor of the garage to support phased expansion.
- Required residents to purchase OCPP-compliant chargers compatible with Wevo's platform.
- Connected each charger to Wevo's system to enable features such as real-time monitoring, billing, and load management to ensure the building's electrical system never overloads, even during peak usage.
- As more chargers are installed, the system will allocate power fairly across the appropriate chargers.

## Resident Installation Process:

- Pay for the conduit run from the panel to their parking space (cost varies based on garage level).
- Purchase charger hardware.
- Pay monthly Wevo subscription fee.

## The Results:

- Pay monthly Wevo subscription fee.
- Less Administrative Burden – The HOA no longer tracks usage, issues bills, or collects payments.
- Financial Fairness – EV drivers pay for exactly what they consume; non-EV owners aren't subsidizing charging.
- Capacity for Decades – 6 chargers installed initially. Infrastructure supports up to 30–40 additional chargers without repeat investment.
- Strategic Growth – Chargers are installed as residents request and pay for them, preventing wasted infrastructure while ensuring reliable access as soon as residents want it.
- Reliable Operations – Early billing glitches were quickly resolved by Wevo's support, reinforcing trust in the system.

## Current Use and Resident Feedback:

- Automated, hassle-free billing – residents are billed directly, and the HOA is reimbursed for electricity costs, removing the manual workload.
- Scalable architecture – The system could grow from a handful of chargers to dozens without re-engineering.
- Advanced load balancing – Critical for avoiding peak load issues in summer heatwaves.
- “The real win for us isn't the number of chargers we have today—it's knowing we can scale for decades without starting over.”— Tom Kempker, HOA Board Member, Park East Tower

