

# Solar Power, Battery Storage & Backup Generator Home Overview

## 431 Glenchester Drive, Houston, TX 77079

This home features 35 professionally installed solar panels with a battery storage and a whole-home backup generator. The system is designed to operate seamlessly with the power grid while providing added reliability, efficiency, and long-term energy savings without changing how the home is used day to day.

### How the System Works

Solar panels generate electricity whenever the sun is shining. When the home is using less energy than the panels are producing, excess power is stored in the batteries. The batteries are discreetly located behind the garage and are completely out of sight. When sunlight is no longer available (evenings or cloudy periods), stored energy is automatically discharged back into the home. The home remains connected to the power grid at all times, allowing power to flow automatically between solar, batteries, and the grid as needed. From a practical standpoint, the system is completely seamless. On days with lower energy usage, excess power may be exported back to the grid.

### Power Usage & Efficiency

On a typical sunny day, energy usage is often split roughly 50/50 between solar and the grid, depending largely on air-conditioning use. Air conditioning is the largest energy draw in the home. For example, on mild sunny days (around 65° in June), the home may rely entirely on solar power and not use the grid at all. During hotter periods, increased A/C usage naturally raises consumption, even though solar production is also higher.

### Solar Battery Backup

The home includes battery storage that works alongside the solar panels to provide added energy independence. Batteries can supply power during periods of lower solar production, peak demand, or minor outages, reducing reliance on the grid. This system enhances reliability and provides flexibility that most homes in the neighborhood do not have.

### Ease of Use & Appearance

The entire system is fully automated and requires no daily management. Battery placement is hidden behind the garage, preserving the home's appearance and curb appeal. Solar panels have no moving parts and require minimal maintenance.

### Monitoring & Apps

Homeowners may monitor the system if they choose, using the Tesla app for battery usage and energy flow or the Enlighten app for solar panel performance. Monitoring is optional—the system operates automatically in the background.

## Service Provider

The system is professionally serviced and maintained by Solstice Solar, providing knowledgeable local support and continuity of care.

**Contact numbers for Solstice Solar:** 281-949-7684 and 281-572-0303

## Energy Costs, Savings & Flexibility

Average monthly electric bills are approximately \$200–\$300. These figures include charging two electric vehicles, which significantly increases energy usage. Without EV charging, estimated savings from the solar system are approximately \$150–\$200 per month. The home remains fully connected to the grid, and buyers may choose any electricity provider available in the area. Solar simply reduces how much electricity is purchased from the grid—it does not change provider choice.

## Whole-Home Generator Backup

In the event of a full power outage, the home is equipped with a Generac whole-home generator that automatically takes over to provide uninterrupted power. The generator is maintained under a twice-per-year professional maintenance plan, ensuring dependable operation and peace of mind. Together, the solar panels, batteries, and generator provide layered power protection that is uncommon and highly valuable.

**Main contact:** Ethan Ngo: 281-771-8850

## Key Takeaway for Buyers

This system is an added benefit, not an obligation. The home functions just like any traditional property, with the advantages of lower operating costs, enhanced reliability, backup power during outages, and future-ready infrastructure—all without impacting daily living or the home's appearance.