



simmitri

## Case Study: A Lifesaving Discovery



**Simmitri Makes a Lifesaving  
Discovery During a  
Comprehensive Energy  
Assessment – Part of  
Simmitri's Dedicated Protocol  
when designing a Solar  
System.**

# Case Summary



Mark and Margaret Stodger were informed that their new home would need a roof replacement. Being environmentally conscious, they knew that they were going to take this opportunity to go solar as well. They wanted to have the entire roof, solar, and energy storage project completed with one company. Because of the great work Simmitri did for one of their neighbors, Mark and Margaret decided to schedule a consultation with Simmitri.

Once they made the choice to move forward with a GAF® Roof system and SunPower® solar project, the process started with a comprehensive energy assessment of the home. During the energy assessment, Simmitri found a carbon monoxide leak caused by a cracked heat exchanger in the furnace.

**This discovery inevitably saved this family's lives!**

# Case Study Introduction

- Before a solar design begins, Simmitri's first step is to perform a comprehensive energy assessment.
- During the energy assessment, a health and safety test is performed on all gas-fired appliances to ensure that gas is released from the home properly.
- The health and safety test is vital in identifying the level of carbon monoxide that is being produced when these appliances are running.



Simmitri believes the **energy assessment** is essential not only to design an effective and intelligent solar system, but for the **safety and well-being of their customers**.

# A Critical Detection

- Carbon Monoxide is a colorless, odorless, and tasteless gas, often called the “silent killer” because it is capable of taking a life before it’s victim ever knew they were at risk.
- When you breathe in carbon monoxide, the amount of oxygen your blood carries to your cells decreases, essentially suffocating each blood cell.
- On average, over 400 people in the US die every year from carbon monoxide produced by non-automotive appliances.
  - 30,000 people in the US experience carbon monoxide related health problems each year.
    - Short-term health problems include: nausea, vomiting, dizziness.
    - Long-term health problems include: chronic headaches, confusion, Increased risk of heart disease, early dementia.

Mark and Margaret’s furnace was producing upwards of 541 parts per million. At this level, three hours of exposure would be life threatening.

25 ppm  
Highest Level of Safe CO  
Operations

150-399 ppm  
Detector should  
sound at these levels  
after 10 mins

400 ppm  
Extremely unsafe,  
can cause  
irreversible  
damage

500+ ppm  
Life threatening

# Client Testimonial



"Simmitri has cleverly differentiated themselves by offering a comprehensive approach towards energy sustainability for homes."

"Beyond the cutting edge technology, the sales professionals, roofers, electricians, and engineers were a pleasant group to have working in our home."

"If I had to move, I would do the energy assessment again just to understand my house. We had to replace the furnace, that's fine, but thankfully that's the worst that happened!"

"You can just see the craftsmanship and dedication in everything Simmitri does."

- Margaret S.

# Over 20 Years of Honor | Value | Care | Expertise

Simmitri is a customer-centric Silicon Valley company with an approach to energy management that is unique to the entire industry. Restoring the Balance of Power™ is about harmony and balance for the home, the environment, but most importantly... the customer.



From high level corporate oversight, to our experienced team of roof system technicians, energy advisers, operations/install personnel, project management professionals, sales consultants, and energy efficiency building performance analysts, we are all passionate about engaging our customers in doing solar the way it should be done.

Due to incredible attention to detail, we are sure to find ways to improve your overall energy usage and reduce monthly spend.

Doing solar the way it should be done is about saving money, but can also be about saving lives!

Although, thankfully, not every home energy review will result in a life-saving discovery, call Simmitri today to take the first step toward a healthy home for you and your family.

For more Information regarding this case study, please refer to our blog [www.Simmitri.com/blog](http://www.Simmitri.com/blog)



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