

Case Study: Natural Gas Solutions for Palm Terrace Assisted Living & Adult Daycare



Natural Gas was there when residents needed it most.

SITUATION

After Hurricane Irma in September of 2017, Florida enacted legislation that requires backup generators at all nursing homes and facilities statewide to maintain air conditioning and other equipment for comfortable, safe indoor temperatures and living conditions during an extended power outage.

Palm Terrace Assisted Living & Adult Daycare of Tampa, Florida, owned by the Tampa Housing Authority realized they needed to get new equipment to meet this requirement.

SOLUTION

Working with Peoples Gas, Palm Terrace installed six (15-ton) natural gas-powered, heat pumps (GHPs) to heat and cool the facility in 2021. A natural gas backup generator was also installed. When the gas heat pumps were installed, they were directly attached to the existing hydronic loop used by the installed electric (100-ton) chiller to control the building's temperature as a safety and system continuity measure.

As Hurricane Ian impacted the Tampa Bay area in September 2022, the Palm Terrace facility was prepared when a nearby electric transformer failed at 2:30 a.m., causing electricity disruptions before the worst of the storm had even arrived.

Fortunately, Palm Terrace had already switched to the GHP air conditioning system as a safety precaution. Without interruption, Palm Terrace's GHP air conditioning system continued operating. Seamlessly, the other systems switched to the backup gas generator to power the facility.

The redundancy of the GHP cooling system allows the facility to use a significantly smaller backup generator to run other HVAC and electrical systems, including elevators which are critical to the residents' comfort and safety. Palm Terrace can also easily switch between cooling systems as energy prices fluctuate, providing both greater resiliency and cost savings.

Additionally, natural gas backup generators prove to be a more reliable option than older diesel-powered generators during a storm should the delivery of diesel fuel be unavailable due to hazardous road conditions.

RESULTS

The residents and staff of Palm Terrace were safe, comfortable, and unaffected before, during, and after Hurricane Ian thanks to the six natural gas GHPs and backup generator on site. Despite the severity of the storm, residents and staff stayed secure and calm — enjoying meals, using elevators, and maintaining their daily activities without any disruption or inconvenience.

Many residents' families reached out to Palm Terrace staff to applaud their emergency management response system when they learned how well their loved ones were taken care of during Hurricane Ian.

Here's one example from a resident's son:

"I just wanted to compliment you and your staff on your emergency operations procedures for Hurricane Ian...WELL DONE!"



Benefits of natural gas heat pumps: Reliable, efficient cooling and heating with quiet operation for greater comfort and energy savings.

"Being prepared to protect our residents during Florida's storms is of paramount importance to the families and communities we serve. We are blessed to have our generator. Many thanks to the Peoples Gas team for their relentless customer service and non-stop communications with us to keep our residents safe."

— Melissa R., Executive Director, Palm Terrace Assisted Living & Adult Daycare

AT THE HEART OF BRINGING FLORIDA BETTER SOLUTIONS



Resiliency

With the GHPs and a standby generator to back up the entire HVAC system efficiently, Palm Terrace has greater resiliency to help ensure non-stop operations and resident care in case of power outages.



Community

Natural gas service to residences and businesses throughout Florida, coupled with backup generators for critical facilities gives peace of mind and comfort in times of need during emergencies.



Economy

With a gas heat pump, customers can save up to 47% with a special lower distribution rate, plus qualify for energy conservation rebates up to \$500 per ton. For details, please visit PeoplesGas.com/BizRebates



Sustainability

An energy-efficient gas heat pump offers sustainable comfort for heating and cooling year-round – while also reducing energy costs, energy use, and greenhouse gas emissions.

To learn more, visit PeoplesGas.com/ghp

