

Case Study: Gas Heat Pump Solution for Tampa Housing Authority



Natural gas supports the safety residents need and the comfort they want.



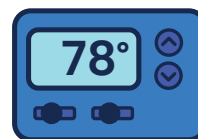
SITUATION

Constructed in 1970, J.L. Young Apartments is an affordable housing community for older adults operated by the Tampa Housing Authority. In addition to featuring 450 apartments, the facility is also the surrounding area's emergency shelter, a designation which requires adequate emergency backup generation.

The apartment community was also in dire need of efficient air conditioning. "We could not connect either of the existing AC units to the generator because there was too much load," said Keith Egner, Assistant Director of Facilities, Tampa Housing Authority. "The generator could only handle lighting, refrigerator outlets, and tenant equipment such as oxygen machines and electric scooters." In terms of efficiency, affordability and reliability, a natural gas solution made the most sense.

SOLUTION

A team from Peoples Gas worked with Tampa Housing Authority and J.L. Young Apartments facility management to replace a second split system with an efficient, economical and reliable natural gas heat pump (GHP). A GHP cools and heats using natural gas instead of electricity. For this



J.L. Young Apartments turned to natural gas to help them cool things down.

application, the team selected a unit that uses only seven amps of electricity to run the controls and fans that make it possible to add the system to the emergency backup generator. This was a significant benefit since the previous AC units were too large and unavailable during a power outage.

RESULTS

With the GHP, J.L. Young Apartments will increase overall energy efficiency and leverage a special monthly GHP rate through Peoples Gas. The cooling costs have been cut in half, and heating costs are about a third of what they were with the former electric heat strips. Now, the energy savings on the building are an estimated \$1,750 per year.

In addition, the existing 70-kilowatt emergency backup generator can now supply all the power needed for the remaining 15-ton electric cooling unit to operate during power outages. Natural gas is not only helping save J.L. Young Apartments money to be more efficient, the residents are also more comfortable. "Many residents use the center daily for meals, playing games, and socializing. They appreciate it being warm during cool weather and, of course, cool during the warm weather," Egner said.



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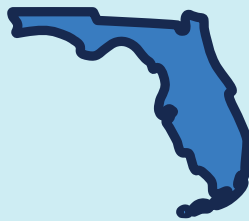
"There is less of a carbon footprint due to less energy being needed than with a fully electric unit," Keith Egner, Assistant Director of Facilities, Tampa Housing Authority, said. "Noise is another pollutant that many do not consider. The units are near the doors. When you pass by the GHP, you can barely hear it running."

AT THE HEART OF BRINGING FLORIDA BETTER SOLUTIONS



Resiliency

Now, with the ability to back up the entire HVAC system with a standby generator, J.L. Young Apartments has full resiliency during power outages.



Community

Full resiliency ensures that J.L. Young Apartments can continue serving the community as a safe emergency shelter in times of need.



Economy

By using a gas heat pump, Tampa Housing Authority's savings from the increased energy efficiency and special lower utility rate are around \$1,750 per year.



Sustainability

The gas heat pump also reduces the carbon footprint of the low-income apartment community, helping the housing authority meet environmental goals.

To learn more, visit PeoplesGas.com/ghp

