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People's choice

Natural gas offers attractive multifamily solutions.

By Drew Robb

As the economy recovers, the demand for rental properties has risen rapidly and, developers are rushing to fulfill the need by building multifamily projects throughout the nation. And more and more developers and owners are looking to natural gas to add value to their properties while keeping costs down.

Meadville Housing Corp. in Northwest Pennsylvania, for example, is involved with National Fuel Gas Distribution Corp. of Williamsville, New York, in a multifamily conversion project: taking buildings that were previously all-electric and converting their heating systems to forced-air natural gas.

One of the sites managed by Meadville Housing is a 32-townhouse complex spread across six adjacent buildings. High tenant electric bills, however, were a major factor in a vacancy rate of 25 percent. That added up to nearly \$5,500 a month in lost income.

Meadville Housing worked with National Fuel to convert previously all-electric heating systems (like below) to forced-air natural gas. A small utility closet contains the bulk of the natural gas equipment.

National Fuel assisted Meadville Housing in equipment evaluation of available heating options to replace inefficient electric strip board heating and wall-mounted individual air conditioning units.

"Tenants previously struggled with electric bills as high as \$400 to \$500 per month during winter months," said Bob Muth, executive director, Meadville Housing. "Since the conversion, total energy bills during the heating season ranged between \$140 and \$220. That alone makes these units far more rentable."

Meadville Housing also added a gas stub option in each unit. This allows tenants to opt for a natural gas clothes dryer if desired. The project's success has made it a showcase for developers.



PHOTO COURTESY OF MEADVILLE HOUSING CORP.

"This has grown into a demonstration project to show similarly situated multifamily facilities the benefits of natural gas," said Marti Sawyer, energy consultant, National Fuel. "Meadville Housing now serves as a model of the retrofit conversion process."

Going tankless

New-build developers, too, are showing a preference for gas. Florida Public Utilities (FPU) has been working with Tampa, Florida-based Spanos Corp. on a 250-unit multifamily complex. The multifamily housing project in Sanford, Florida, is spread across five buildings with 50 apartments in each. A bank of five Noritz condensing tankless water heaters are installed in a mechanical room at one end of each building. Water is heated by these units and re-circulated at 140° Fahrenheit to offset temperature drop. A one-inch water supply pipe transports the hot water. There is no need for holding tanks since the one-inch pipe acts as a holding tank in itself.



The Village Cooperative in Kansas City, Missouri, (seen here under construction) is another multifamily project preferring natural gas to electricity for heating. Each unit at the Village Cooperative has a natural gas Magic-Pak by Lennox for space heating.

ers in their units," he said. "This design reduces the cost of heating water by 50 percent to 60 percent per unit while opening up more space."

Hayhurst added that the amperage of the electrical master panel is considerably reduced since a significant percentage of amp draw is for heating water.

Magic for seniors

Another multifamily project preferring natural gas to electricity for heating is the Village Cooperative in Kansas City, Missouri. A 52-individually-metered apartment complex is under construction for senior living by Real Estate Equities Development LLC (REED) of Eagan, Minnesota. REED performed cost comparisons on natural gas versus electric. Natural gas came out easily on top. Each unit has a natural gas Magic-Pak by Lennox for space heating. In addition, natural gas powers the central water system for all units as well as furnaces for common area fireplaces.

"The all-in-one design of the natural gas heating unit fits in a compact space and eliminates the need for 50 or more condensing units around the building," said Andrew Schaefer, vice president, development, developer REED.

Magic-Paks are available in sizes from 1 ton to 3 tons. They come pre-charged and pre-wired for easy installation. As a result, engineers no longer need to specify many of the components that accompany traditional split-system heating and cooling solutions: No chaseways, basepads, external utility connections, disconnects or refrigerant lines. Estimated savings per unit: \$480.

The small footprint of these natural gas heaters makes them attractive for new build as well as retrofit projects. Further, the absence of multiple condensing units conserves open space on the grounds.

Beverly Passantino, senior business development representative, Spire Missouri West, worked closely on the project with REED.

"Even though natural gas proved to be cheaper and more energy efficient, those were not the most important or deciding factors," Passantino said.

The ultimate reason natural gas appliances are used in these projects, she said, is customer preference.

"After countless requests for natural gas from our customers, we now spec all of our multifamily projects with natural gas appliances," Schaefer said. "Natural gas is a warmer, more comfortable heat, and tankless units never run out of hot water." ▶



A bank of five Noritz condensing tankless water heaters are installed in a mechanical room at one end of each of the five buildings making up the 250-unit multifamily Spanos Corp. complex in Sanford, Florida. The design saves \$800 per unit, or \$200,000 in upfront costs.

This innovative design eliminated the need for individual water heaters and meters for each apartment. This saved \$800 per unit, or \$200,000 in upfront construction costs, according to Jim Hayhurst, commercial/industrial account manager, Florida Public Utilities.

"Residents don't need water heat-

FOR MORE INFORMATION

Nortiz: www.nortiz.com

Lennox's Magic-Pak: www.magic-pak.com



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