

Natural Gas Put to the Test

TECO Peoples Gas is helping a Florida laboratory install natural gas technology to support crucial water supply testing operation.



A full-service laboratory, Florida Spectrum Environmental Services has been analyzing our water for more than 40 years.



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Lyle Johnson
President, Florida
Spectrum Environmental
Services

Testing Florida's water supply is serious business. Since 1974 and passage of the federal Safe Water Drinking Act to eliminate pollution from animal wastes, pesticides and wrongfully disposed chemicals, the state requires a battery of tests on the water we drink. A Clean Water Act also protects national lakes, streams, rivers and wetlands, with more state-required testing to verify pollution levels.

Florida Spectrum Environmental Services has been analyzing our water for more than 40 years. As a full-service testing laboratory, the company evaluates environmental contamination including analysis of groundwater, surface water, drinking water, soil and hazardous wastes. The lab operation relies on sophisticated atomic absorption, chromatography, spectrometry, microbiology and radiochemistry technology and instrumentation — the same equipment that is vulnerable to power outages but needed 24/7.

“We often have to operate like a first responder,” explains Lyle Johnson, president of Florida Spectrum Environmental Services.

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There is no room for downtime, and it is often impossible to perform the testing at other locations because of holding time requirements — described as the time elapsed between when the sample is taken and tested.

While Florida Spectrum has outfitted its lab in Fort Lauderdale with a 70kW backup generator to meet client contract requirements, the generator is not large enough to provide power to the 20,000-square-foot facility's testing technology, lights and air conditioning. During the aftermath of Hurricane Irma, the lab was without power for five days. Shortly after recovery, Johnson started exploring options for a second generator. That is where TECO Peoples Gas stepped in with a new idea.

Natural gas was already working at the facility to serve the backup generator, but Johnson never considered using natural gas for space conditioning or continuous power generation. With micro-combined cooling, heat and power — or mCCHP — he could get both. Plus, mCCHP works around the clock producing measurable savings with efficient natural gas. A backup generator only works during an emergency while mCCHP provides benefit every day.

Four mCCHP units are being installed to provide Florida Spectrum with reliable air conditioning, power for all testing instrumentation and emergency backup power when needed. In addition, annual operating costs will be lowered, greenhouse gas emissions reduced and resiliency dramatically improved.

“mCCHP technology was almost a no-brainer for us,” says Johnson.

For more information on mCCHP technology for your home or business, please contact Melanie Anthony at mkanthony@tecoenergy.com or visit peoplesgas.com/GHP and follow Florida Spectrum's installation.