

South Orange tests device to automate gas lamps



By [Richard Khavkine/The Star-Ledger](#)

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Village president Douglas Newman, on left, and Trustee Howard Levison stand next to a gaslight that shuts off during the day on Wyoming Avenue in South Orange on Friday. Fifteen of the new cost-savings devices will be installed and evaluated in South Orange over the next year.

SOUTH ORANGE — The future isn't so bright for South Orange. And that's a good thing.

After eight years of research and design, 15 of the village's historic gas lamps have been equipped with a device that shuts them off during daylight hours and reignites them when darkness falls.

The hope is that after a yearlong testing period, the battery-powered device, developed by PSE&G together with the Northeast Gas Association and others, will be installed in each of the village's 1,438 gas lamps.

The newly outfitted lamps will be monitored by volunteers, including village officials.

"We want to make sure we go through the seasons. Rain, snow, short days, long days," said Trustee Howard Levison, the village's principal advocate for the shortened gaslight cycle.

The lamps, installed in 1850, are throughout the village. For decades, the village employed gaslighters, who would go from lamp to lamp, lighting them by hand at dusk and extinguishing them shortly after daybreak. Cheap gas and rising wages made it more cost efficient to leave them running all day, Levison said.

It's estimated that the lamps represent about 75 percent of the energy costs borne by the village. By changing to the new devices, taxpayers could save between \$200,000 and \$400,000 a year, said Levison, an engineer by profession.

The savings to the ozone layer can also be significant, Levison said. By one measure, extinguishing the lamps when they're not needed will prevent the release of 1,250 tons of carbon dioxide each year.

Over a period of weeks, testers and engineers ran the prototype through 100,000 on/off cycles, said Paul Pirro, a technical support leader of PSE&G's gas delivery division. "But field conditions are brutal in New Jersey," he said.

The further challenge is to install the device's several fragile components – a valve, sensor, igniter, batteries – on lamps that are essentially antiques.

“These things are very delicate,” said Pirro, who worked on the prototype project for about four years. “Once they’re installed, they should work.”

The village hopes to secure a grant that would pay for one-third of the \$1.5 million it will cost to install the devices. At current gas prices, the town would recoup its investment within five years, Levison said.

Although village officials have through the years considered replacing the gas lamps with electric ones, they have always concluded that South Orange’s unique grid – there are no overhead power lines running through the village’s residential streets – is worth preserving.

In fact, 17 of the lamps were installed on Tillou Road West as recently as five years ago, Levison said.

Boston, Cincinnati, New Orleans and several municipalities still employ gas lamps. None of those towns, though, use them as their principal source of lighting in residential neighborhoods.

“We want to maintain our uniqueness,” Levison said.