

Solar, fuel cells at landfill



BARRY SLOAN

Brookhaven plans to change the landfill, set to be capped in 2024, into an energy park that could offset the facility's declining revenues.

■ **Brookhaven Town** hopes energy will boost revenues

■ **Fuel cells**, methane gas also viable at closing dump

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Brookhaven Town's plan to transition its sprawling landfill in Yaphank to an energy park topped with solar arrays, fuel cells and locally brewed methane gas could help offset the facility's declining revenue stream, officials say.

The landfill will be decommissioned in stages over the next six to seven years, opening scores of acres of property for solar arrays and other power that could feed upward of 44 megawatts into the electric grid, officials said. Efforts are underway to accelerate the closure of some sections of the landfill. When complete, the facility could power more than 11,000 homes.

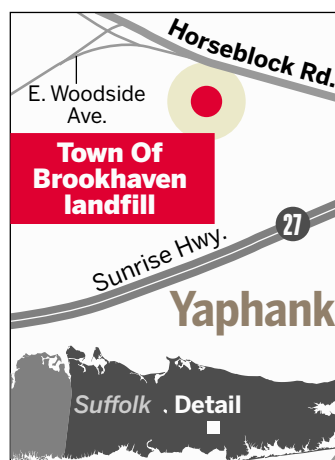
Brookhaven's landfill, at 270 feet tall, is one of the last operating landfills on Long Island.

It's also a major revenue producer for the town, generating net revenue after expenses of \$30 million to \$33 million a year.

"When it's decommissioned, it will leave a major funding gap," said Brookhaven Supervisor Edward Romaine. "Some of the lost revenue will be offset by the energy park."

The path to completion isn't simple. Brookhaven still needs approval from the Long Island Power Authority to transfer two solar-project awards approved for properties in Yaphank and Medford to the landfill, said Matt Miner, chief of operations for Brookhaven town and commissioner for the department of recycling and sustainable material management.

In addition to planned solar arrays, the town has an agreement with Fuel Cell Energy for up to 7.4 megawatts of fuel cells — generators that produce power through an electrochemical process without combustion. They will be built starting this year on a low-lying southern portion of the landfill. The town is



proposing to offer some methane gas produced by the landfill for the generators, though it's uncertain the quality and volume will meet the project's standards, Miner said.

Methane gas produced by the landfill also could be piped to a planned anaerobic digester at the nearby Long Island Compost facility, officials said, adding 1.5 megawatts of power to a generator that is expected to produce upward of 6 megawatts using food scraps and other materials.

At present, 63 percent of the landfill is capped and closed. By year's end, 75 percent will be. "We'll cease accepting material by end of 2024," Miner said. "We continue to cap as we go. We'll cap the entire site by 2025."

By year's end, the town will have around 40 acres atop the landfill for solar power. The town expects to lease the property to a developer capable of installing 16 megawatts of solar power, split between community solar to benefit low-income residents and a separate array to feed the electric grid, Romaine said.

When the landfill is fully capped by the end of 2024, there will be an additional 30 acres for solar, Miner said. In all, the 70 acres atop the landfill will be capable of powering 28 megawatts of solar power, enough to power an estimated 165 homes per megawatt, he said.

Brookhaven has working solar arrays at the Holtsville farm facility and the Papermill Road composting facility in Manorville, for which it receives annual lease payments.

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CORRECTION

Because of an editing error, a story published Sunday about President Donald Trump's State of the Union address incorrectly stated the day a senior White House official briefed reporters on the speech. It was Friday.

THIS DATE IN HISTORY

1845 Edgar Allan Poe's famous narrative poem "The Raven" was first published in the New York Evening Mirror.

1919 The ratification of the 18th Amendment to the Constitution, which launched Prohibition, was certified.

1936 The first inductees to baseball's Hall of Fame, including Ty Cobb and Babe Ruth, were named in Cooperstown.

1958 Actors Paul Newman and Joanne Woodward were married in Las Vegas.

1975 A bomb exploded inside the U.S. State Department in Washington, causing considerable damage, but injuring no one; the radical group Weather Underground claimed responsibility.

1998 A bomb rocked an abortion clinic in Birmingham, Alabama, killing security guard Robert Sanderson and critically injuring nurse Emily Lyons. (The bomber, Eric Rudolph, was captured in May 2003 and is serving a life sentence.)

2008 Raymond Jacobs, believed to be the last surviving member of the group of Marines photographed during the first U.S. flag-raising on Iwo Jima, died in Redding, California, at age 82.