



New York Times - April 2007

A Company Puts Itself On a Solid Solar-Power Footing

Photographs of historic industrial sites from around here line the conference room of **Hall's** Warehouse, a trucking and warehouse company owned by the Jayne family for 42 years.

There is one of the Spicer Manufacturing Company, the first to make universal joints used in automobile drive shafts, and one of Hadley Airport, where the first nighttime transcontinental airmail flight to California originated in 1925.

Now **Hall's** is making history itself, in a particularly modern way. The company, which attracts a steady, orderly flow of tractor-trailers from Route 287, is installing what will be, briefly, the largest commercial solar-electric system in the country. It is part of a solar boom in New Jersey, aided by state and federal incentives.

When the \$9 million system is completed next month, it will generate 1.4 megawatts of electricity using 8,000 solar panels mounted on the roofs of two refrigerated warehouses that store everything from yogurt to beef. Google is building a 1.6-megawatt system at its headquarters in Mountain View, Calif., and hopes to begin operation in June.

The system at **Hall's**, which will produce one-tenth of the warehouse company's electricity needs, should reduce carbon dioxide emissions by 24,000 tons over the 30-year life of the panels, equivalent to saving two million gallons of gasoline, state and company officials said.

The previous largest commercial installation in New Jersey was at the Johnson & Johnson Consumer Companies in Skillman, which has a 505-kilowatt ground-mounted system. The largest combined system in the state is public: the Bayonne School District has a two-megawatt system for nine schools

Thanks to \$4.6 million in state and federal incentives, including rebates and tax credits, the solar system at **Hall's** will pay for itself in about four years, said Bruce Curtis, the chief operating officer of DT Solar, the four-year-old Branchburg company that designed and installed the system and recently received millions of dollars in investment from Ted Turner. Mr. Turner, who had been looking for a solar company to invest in, visited the warehouse in late January to promote the project.

"There's so much attention to California, people miss what's happening right in our own backyard," said Anne Marie McShea, a spokeswoman for the State Board of Public Utilities.

Since 2001, when state lawmakers developed an aggressive system of rebates and incentives to encourage the use of renewable energy, solar installations have climbed to about 2,000 from 9, generating power for everything from two-bedroom houses to pharmaceutical companies.

The New Jersey Clean Energy Program, managed by the Board of Public Utilities, gave away \$180 million last year in rebates and incentives for equipment that uses renewable energy and energy-efficient technology, matching an average of 50 percent of the cost of the projects. That includes \$76 million for 989 solar installations. The rebate varies according to the size of the

system and whether it is public or private. A 10-kilowatt system, enough to power a large house, costs about \$7,700.

Under a state mandate, utility companies must provide at least 20 percent of New Jersey's energy needs using renewable energy by 2020, with solar power contributing 2 percent.

To meet the state's renewable energy goal, residents and businesses must install an average of about 120 megawatts of solar-electric power a year until 2020. Currently, 36 megawatts of solar-power capability have been installed in New Jersey.

The Clean Energy Program relies on a 1 percent surcharge on gas and electric bills, and the rebate program has a waiting list for large projects through the end of 2008, when the current financing expires.

The Board of Public Utilities is reviewing the financing mechanism for the rebate program for 2009 to 2012. It may eliminate some or all of the rebates in favor of other incentives, like renewable energy credits, said Michael Winka, the program's director.

To avoid penalties, utilities can buy renewable energy credits from private generators of renewable energy, including solar, through an Internet-based trading system. Homeowners and businesses can currently earn about \$2,000 a year this way. **Hall's** says it stands to make \$390,000 a year through the trading system and save about \$210,000 on its energy bill; its annual bill is \$3 million.

Customers can also sell excess energy to utilities at market value, a system called net metering that can wipe out their electricity bills altogether. Federal incentives include a 30 percent tax credit for installation costs of solar projects.

The board is scheduled to release recommendations on incentives in April or May before hearings in early summer. Even with the anticipated changes, residents should still be able to recoup the cost of a solar-electric system within 10 years of its purchase through credits and savings on electricity bills, Mr. Winka said.

Dena Mottola, the executive director of Environment New Jersey, an environmental lobbying group, said the state must act quickly or risk losing solar companies.

"It is really urgent that we get this transformation of renewable energy incentives in place quickly so that we can keep up the great momentum we've had in the past in the growth of solar in the state," she said.

For **Hall's**, the timing of incentives could not be better. William E. Jayne III, who owns the company with his two brothers Dale and Bruce, said he relished the good will the project had engendered as much as the cost savings. A business associate recently called to thank him for promoting clean air, he said.

Mr. Jayne said he planned to install in the conference room a flat-screen monitor that tracks the amount of electricity the warehouse is generating along with its environmental benefits.

"If you want to find me in a great mood," he said, "just look outside and find a bright sunny day."