

## LIPA, BP Solar and Brookhaven National Lab flip the switch at the Long Island solar farm

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The 32-megawatt photovoltaic array of the Long Island Solar Farm. The central Brookhaven National Lab campus is seen at left.

Officials from the Long Island Power Authority (LIPA), BP Solar International, Inc. (BP Solar), Brookhaven National Laboratory and a host of government officials and environmental leaders today celebrated the completion and commissioning of the Long Island Solar Farm (LISF) Project. Owned by BP Solar and Met Life, the LISF installation is part of the largest solar energy project in the state of New York, the largest photovoltaic array in the eastern U.S., and among the largest in the nation constructed on federal property. The 32-megawatt (MW) LISF, which is made up of 164,312 solar panels hosted at the U.S. Department of Energy's (DOE) Brookhaven National Laboratory, also boasts the smallest footprint for a solar array of its output, further solidifying Long



Island as a national leader in clean, renewable energy.

"This is a historic day for LIPA, our customers, and all of Long Island. The thousands of solar panels mounted at this site represent a significant investment and commitment to Long Island's energy, environmental, and economic future," said LIPA chief operating officer Michael D. Hervey. "This solar farm not only strengthens our renewable energy portfolio, but also reduces our reliance on fossil fuels, assists New York State in meeting its goal of 30 percent renewable resources by 2015, and will continue to act as a catalyst for fostering a bright future and green economy on Long Island through the creation of new, high-quality energy jobs."

The U.S. DOE officially welcomed LISF to Brookhaven National Laboratory, a DOE facility, and applauded the years of work put into the project by LIPA, BP Solar, DOE's Brookhaven Site Office, and Brookhaven Science Associates, which manages and operates Brookhaven Lab for DOE. New, "green" infrastructure like LISF promotes the DOE's national energy security and clean energy goals. Such beneficial use of DOE sites attracts investments from public and private sources, creates jobs, encourages collaboration between agencies, and helps achieve President Obama's objectives to strengthen America's energy security and to deploy clean energy resources. This exemplifies the goal of DOE's Asset Revitalization Initiative.

"This landmark project was truly a team effort and a historic achievement for all involved," said Mike Petrucci, CEO of BP Solar. "In addition to our primary partners, key political, community, environmental and labor leaders played important roles throughout the development and construction of the project. The result is a significant source of clean energy for Long Island, as well as a positive economic impact for the local workforce and businesses. I am certain Long Islanders will be very proud of this facility for many years to come."



Doon Gibbs, Brookhaven Lab's deputy director for science & technology, added, "In addition to providing thousands of Long Island homes and businesses with clean, renewable electricity, this impressive solar array also offers Brookhaven Lab scientists a unique opportunity to study the challenges of deploying large-scale solar power installations in the northeastern U.S, where variable weather conditions can impact the array's output on an hour-by-hour or even minute-by-minute basis. Understanding these local 'microclimate' effects will help us reliably integrate power from intermittent sources -- like solar and wind -- into the electric grid, and advance state and national renewable energy goals."

"This project strengthens Long Island as a national leader in renewable energy," Congressman Tim Bishop said. "This is a win-win-win, providing renewable energy, creating jobs and protecting our environment. I am glad we were able to build a strong partnership to make this happen."

Congressman Steve Israel stated, "The completion of the Long Island Solar Farm means jobs for Long Islanders and renewable energy for Long Island families and businesses. I'm proud to have helped secure federal funding to help Long Island transition to the latest clean energy technologies." "I am pleased with the collaboration between the Long Island Power Authority and Brookhaven National Lab," Senator Kenneth P. LaValle said. "The blueprint for our nation's energy future – green energy – and the jobs and new businesses it will create is being tested and implemented right here in the First Senate District."

"The Long Island Solar Farm is great news for Long Island and the entire state of New York. Not only does this project play an important role in our energy future, but it also advances the State's agenda of fostering a clean-energy economy with the creation of new high quality jobs. It's been a pleasure working with this collaboration from its infancy stage, to putting shovels in the ground, and now actually flipping the switch on



one of the most important energy projects in the history of Long Island," said president and CEO of the Long Island Association, Kevin S. Law.

Co-owned by BP Solar and MetLife through Long Island Solar Farm LLC, LISF will introduce approximately 50 gigawatt-hours per year of clean, Long Island-based renewable energy into LIPA's electric grid. This amount of solar energy is equivalent to the electrical consumption of roughly 4,500 households.

Additionally, the project will cause the abatement of more than 30,000 metric tons of carbon dioxide emissions per year as well as substantial amounts of other pollutants such as nitrogen oxide (NOX) and sulfur dioxide (SOX). These environmental benefits, combined with a thoughtful and comprehensive stakeholder engagement approach, helped the project earn the Best Photovoltaic Project of Year Award from the New York Solar Energy Industries Association (NYSEIA), further illustrating that the LISF project sets the gold standard for innovative, sustainable development.

"It's a great pleasure to be an investor in the LISF, as it enables MetLife to support an important renewable energy initiative. It allows us to further our commitment to supporting efforts that truly drive sustainability and align with our high quality investment philosophy," said Steven J. Goulart, executive vice president and chief investment officer for MetLife, Inc. "The LISF is just one example of the more than \$1.5 billion that MetLife has invested in renewable energy projects, and it's an endeavor that I believe will make the hundreds of MetLife employees who work or live on Long Island proud."

Supervisor Mark Lesko added, "I commend LIPA, Brookhaven National Laboratory, and BP Solar for their partnership and vision to make Long Island a national leader in solar energy. It is fitting that this extraordinary alternative energy project is located at BNL, whose everyday research



breakthroughs are the key to Long Island's future."

LIPA has entered into a long-term power purchase agreement (PPA) with LISF to provide the energy produced and Renewable Energy Credits (RECs) from the solar farm. The costs to LIPA under the PPA for the energy produced by LISF are estimated to total \$298 million (including interconnection costs) over the contracted 20-year term or about \$0.60 per month for the typical residential customer. "This agreement not only allows us to provide clean energy to our customers but it also delivers price stability for our customers in an energy market where oil and gas prices remain volatile," added LIPA COO Michael Hervey.

## Protecting environmentally sensitive land

The LISF conforms to State law and meets all standards and guidelines for a project of this type. As part of the project, LIPA, Brookhaven Lab and BP Solar established a Natural Resource Benefits package to enhance environmental benefits of the LISF project: LIPA will provide \$2 million for open space preservation within the Central Pine Barrens Region; Brookhaven Lab will preserve an additional 51 acres of property that builds upon the 500-plus acres it previously preserved in the 1990s; and. BP Solar will provide \$75,000 for ecological habitat, research and restoration.

"This is a major milestone in Long Island's energy history: for the first time, Long Island has a power plant which will generate reliable and clean electricity for decades to come, using our abundant sunshine instead of polluting fossil fuels," said Gordian Raacke, executive director of the not-for-profit organization Renewable Energy Long Island (reLI). "Thanks to LIPA's vision and leadership, we are demonstrating that solar energy systems are a proven technology not only for small rooftop installations but also for large, utility-scale



applications."

"The Long Island Solar Farm is an exciting example of how a promising clean energy technology of the future becomes today's reality. This transformational project truly begins to leave fossil fuels as a remnant of our polluting past and begins a new legacy for clean, safe, sustainable energy. CCE is proud to have supported this landmark project. A big congratulations to BNL, LIPA, BP Solar and Congressman Bishop for their commitment to get this done," said Adrienne Esposito, executive director of Citizens Campaign for the Environment.

## **About LIPA's 50 MW Solar project and LIPA's Solar Pioneer and Entrepreneur Programs**

In February 2009, LIPA announced the results of a competitive procurement process, selecting BP Solar and enXco Development Corp to provide LIPA with capacity, energy and associated RECs from nearly 50MW of solar arrays. The BP Solar Long Island Solar Farm and the enXco Eastern Long Island Solar project were both selected and approved by the LIPA Board of Trustees to help meet LIPA's renewable energy goals. The 50MW of solar energy from the BP Solar and enXco projects will be enough to power roughly 6,500 homes, will reduce greenhouse gas emissions and the consumption of fossil fuels, and will create new clean-energy jobs.

LIPA's solar programs continue to serve as economic stimuli for the Long Island economy and have provided over 4,800 residential and commercial customers with financial incentives to "go green" using renewable energy, while at the same time creating a robust solar market on Long Island. Investments in energy efficiency and renewable energy programs help to delay or forego the need to build new electricity generating facilities on Long Island.



## Provided by Brookhaven National Laboratory

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