

South Fork Wind Farm

Frequently asked questions

Doesn't Long Island already have more energy than we need?

In general, that's right; but not here on the south fork. Unlike other parts of Long Island, power usage on the south fork has been growing steadily and East Hampton needs more energy supply. In fact, the Long Island Power Authority (LIPA) has already added temporary fossil-fired generators in East Hampton and Montauk just to avoid summertime black-outs or brown-outs.

Why build an offshore wind farm?

In 2015 LIPA ran a competitive bid looking for the most cost-effective way to supply the south fork's energy needs. LIPA received over a dozen proposals including several options for new fossil-fired power plants and solar installations. After considering all these options, and transmission alternatives as well, LIPA concluded that the South Fork Wind Farm was part of the most cost-effective portfolio to serve the area's need. Additionally, the wind farm will help the Towns of East Hampton and Southampton, as well as the State of New York and LIPA meet their renewable energy targets.

How will the wind farm address the area's power needs?

Offshore wind is very reliable and by delivering power directly to LIPA's East Hampton substation, the project is designed to help prevent summer power shortages on the south fork. During peak summer hours, the wind farm will supplement existing power sources to help ensure the south fork has sufficient power supply. Offshore wind typically peaks in output during the highest-demand hours in the late afternoon and early evening, which is the time that the grid needs power the most. The South Fork Wind Farm will produce enough energy to power 70,000 typical homes every year.

Where is the wind farm going to be?

The wind turbines will be 35 miles east of Montauk Point, far out into the Atlantic Ocean. The site was selected for wind development through a multi-year study coordinated by multiple state and federal agencies. That process started with an area of nearly 1,500 square miles and whittled away parts that were important to shipping, fishing, wildlife, environmental, historic preservation, and other interests. Ultimately, the federal government identified and leased an area of 257 square miles in a 2013 competitive auction that Deepwater Wind won. The South Fork Wind Farm will be located within a portion of that lease area.

How will the wind energy get to the grid?

A buried electrical cable will connect the offshore wind farm to the existing East Hampton substation located off Cove Hollow Road. Offshore, the cable will be buried 4 – 6 feet beneath the sea floor. Onshore, the cable will be buried 3 – 8 feet beneath existing roads and other rights-of-way like a typical underground utility. Other than the new equipment at the substation needed to connect the transmission cable to the existing grid, all the project's on-shore facilities will be buried.

Where will the cable come ashore? And what route will it take to the substation?

The cable is proposed to come ashore deep under Wainscott Beach at the end of Beach Lane, subject to reaching final real estate agreements with the East Hampton Town and Trustee Boards. A cable landing at Hither Hills State Park is the alternate route if those agreements are not reached. Regardless of the landing location, power from the South Fork Wind Farm will be delivered to the existing substation located off Cove Hollow Road in Wainscott.

Will installation of the cable impact the beach?

No. We will use a very common technique known as horizontal directional drilling (HDD) that allows us to drill deep under the beach without ever disturbing its surface. It also allows us to maintain public access to the beach throughout the construction process. HDD is a well-proven process that will enable the installation of an underground conduit (a type of high-density plastic pipe) that connects the road upland from the beach to a point 1,750 feet offshore from the mean high-water mark, which the submarine cable will be pulled through. For the proposed cable landing at Beach Lane, the conduit will be installed at least 30 feet under the beach and deep under the nearshore area, ensuring it is well protected from erosion and impacts from major storms over its full life. The only visible evidence of a cable landing post-installation will be a set of standard manhole covers in the parking lot and a nicely restored road.

What about electric and magnetic fields (EMF)?

All devices that are powered with electricity have an associated EMF. Electric cables of this size and larger have been safely buried in residential neighborhoods and under bodies of water for decades. In fact, there are even larger cables in operation today at public beaches on Long Island. At every point along our cable's route, EMF will be within safe, permitted levels. Offshore, it will not impact fish patterns or marine electronics, and onshore it will not interfere with any personal or home electronics.

We get strong storms – nor'easters and sometimes hurricanes. Can the project handle those?

Yes. The wind turbines are designed to withstand the strongest weather conditions in the region, including hurricanes and winds well over 100 mph. The structures that hold the wind turbines to the sea floor are built to withstand the 1,000-year storm, which assumes wave heights of 50 feet. The burial depth of the cable offshore and beneath the beach also considers scour and erosion to ensure the cable remains fully buried through even the worst of storms, over the life of the project.

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How will the project impact the environment?

Offshore wind farms provide many benefits to the environment. That is why leading national and local environmental organizations like the National Wildlife Federation strongly support the development of offshore wind. Twenty-five years of industry experience and research in Europe, as well as our Block Island Wind Farm, prove that offshore wind can be built in harmony with the environment.

The construction of the Block Island Wind Farm required over 20 federal, state and local approvals. The environmental assessments conducted as part of that permitting concluded that the project would have no significant impact on any species, habitat or other use of the site because the disruptions during the construction phase are short term and subject to various mitigation measures.

We also worked closely with leading environmental advocacy groups to implement a program for protecting marine mammals and sea turtles. And, we conducted fishing surveys before, during, and after construction of the Block Island Wind Farm, which are showing that fish and marine life remain abundant around the project.

Is the project going to impact fishing?

The experience so far at the Block Island Wind Farm is that fishing near the wind farm is at least as good as it was before the wind farm. The South Fork Wind Farm will be built using the same stakeholder engagement and data-based design principles that guided Block Island. All electrical cables will be safely buried beneath the sea floor so that all types of fishing vessels can safely navigate over them. In limited instances when a cable cannot be fully buried, a protective cover will be laid over it. The location of all the wind farm and cable components will also be clearly marked on navigational charts.

Importantly, the state and federal agencies that identified the project's site intentionally excluded the slopes along the sea floor of the area called Cox Ledge because of their value to the fishing community. Additionally, offshore wind developers cannot restrict access to wind farm sites, and the Coast Guard does not impose restrictions around the turbine foundations after construction, so vessels are allowed to fish in and around them. In fact, the submerged portions of the structures act as an artificial reef, growing habitat such as seaweed that attracts sea life.

Is there any oversight? Who makes sure you do what you say you're going to?

A long line of regulatory authorities will be heavily involved in this project. Before we can begin construction, the project must earn approvals from multiple federal and state authorities. At the federal level, the Bureau of Ocean Energy Management (BOEM) will lead a review under the National Environmental Policy Act (NEPA) that will include the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (FWS), the Army Corps of Engineers (USACE), U.S. Coast Guard (USCG), and the Department of Defense (DOD), among others. At the state level, the Public Service Commission (PSC) will lead a review under the Article VII of the Public Service Act that will include the Department of Environmental Conservation (DEC), State Parks, Recreation and Historic Preservation (SHPO), among others. The Article VII process will include participation by the Town of East Hampton and the East Hampton Town Trustees. Our permits will require monitoring and reporting both while we're constructing the project and after construction is complete.

I read that the project will be delivering more capacity than planned, an increase of 40MW. How does this change the project?

The project will use more powerful turbines than initially planned simply because turbine technology has improved since the project was proposed in 2015. This means the wind farm can produce more clean power within the same 15-turbine footprint and with the same transmission cable. LIPA has agreed to purchase the additional capacity, which is available at a reduced rate. According to LIPA it is the lowest cost utility-scale renewable power ever on Long Island.

Will the size of the project keep expanding?

No. The wind farm cannot exceed 15 turbines and its maximum output will not exceed 132MW.

How will Deepwater Wind's recent merger with Ørsted, and partnership with Eversource impact the project?

Ørsted and Eversource have agreed to honor all of Deepwater Wind's local commitments, and the combining of the teams provides more expertise and resources to support project execution. South Fork Wind Farm is a 50/50 joint venture between Ørsted and Eversource. The partnership combines Eversource's industry leading expertise in transmission with Ørsted's experience as the world leader in offshore wind energy.

What happens at the end of its useful life?

At the end of its useful life, the project will be decommissioned and the wind turbines removed. The permits we need to build the project require that we set aside enough funds to pay for the complete decommissioning of the project.

Who's going to pay for all of this?

Ørsted and Eversource will pay for 100% of the cost of building, operating and maintaining the South Fork Wind Farm. The energy produced by the South Fork Wind Farm will be sold to LIPA at competitive prices under the terms of a 20-year agreement. If the wind farm doesn't produce energy, we don't get paid.

What's this going to do to my electric bill?

LIPA has estimated that the South Fork Wind Farm, including the upgrade, will cost the average ratepayer between \$1.39 and \$1.54 per month when it starts operating in 2022. LIPA determined through a competitive process that this was the least-costly way to meet the need for new power supply on the South Fork, and that constructing other alternatives, including a new fossil-fired plant, solar installations and upgrades to the existing transmission system, would have cost ratepayers more.

Will the project do anything to help the local economy?

Yes! In addition to the benefits of stabilizing electricity rates and preventing tons of carbon emissions, the wind farm will also create jobs. Deepwater Wind signed an MOU with the Building and Construction Trades Council of Nassau and Suffolk to put Long Islanders to work on the project, and Ørsted and Eversource will honor this agreement. Deepwater Wind also committed to locating the permanent Operations and Maintenance facility for the project in Montauk in connection with its request for real estate rights for the route from Beach Lane, and Ørsted and Eversource will honor this commitment as well.

