

Renewable energy digest #2

Google backs 'superhighway' for wind power

—by Juliet Eilperin and Debbi Wilgoren

Internet search engine giant Google announced in October that it is investing in a mammoth project to build an underwater "superhighway for clean energy" that would be able to funnel power from offshore wind farms to 1.9 million homes without overtaxing the already congested mid-Atlantic power grid.

The project, dubbed the Atlantic Wind Connection, calls for spending as much as \$5 billion to create a 350-mile network of underwater cables stretching from northern New Jersey to Virginia. It would eliminate the need for offshore wind developers to build transmission lines of their own, easing what can be a barrier for such projects.



An offshore wind farm off the coast of Atlantic City, New Jersey
[<http://greenjersey.org>]

Google is partnering with Good Energies, an environmentally focused international investment company based in New York, London, and Switzerland, and Tokyo-based Marubeni to finance the project. The project is led by Trans-Elect, an electric transmission company in Chevy Chase, Maryland.

The venture constitutes "a huge, huge bold project" that would "stimulate development that would otherwise be impossible" offshore along the East Coast, said Trans-Elect's chief executive. The grid would transmit 6,000 megawatts of offshore wind energy.

The project is in its very early stages but Google is willing to take calculated risks on large-scale projects that can move an industry because it provides a smart, scalable platform for future expansion.

Although several offshore wind farms are in development along the East Coast, none is operating. Some, such as the Cape Wind project, which won federal approval in April,

Atlantic Wind Farm off the coast of New Jersey
[<http://greenjersey.org>]



have encountered fierce local opposition on aesthetic and environmental grounds. Others face bureaucratic hurdles.

Offshore wind development has been identified as top energy policy priority by the Obama administration. "By identifying high-priority areas offshore for potential wind projects, we can explore the development of a transmission backbone in the Atlantic Ocean to serve those areas," Interior Secretary Ken Salazar said last month. Lack of sufficient transmission capacity is a hurdle that solar projects on the West Coast are facing; the Atlantic Wind Connection may provide some useful insights. "Rather than developing transmission infrastructure plans on a piecemeal basis," said the Secretary, "we should—in close coordination with the private sector, states, and tribes—lay out a smart transmission system up front."

The transmission line would address the problem of wind's intermittent supply by tapping into a much broader swath of the coast to meet consumer demand. While the project is outside of Google's normal focus, officials said they believe in investing in projects that make good business sense and further the development of renewable energy.

Google will provide 37.5 percent of the equity for the initial development. *The New York Times*, which first reported the project, said Google's initial investment in the project will be \$200 million. Trans-Elect hopes to begin construction in 2013 on what it calls a "backbone transmission project" and complete it by 2020, but an initial stage should be finished and operational by 2016. Consumers who would receive electricity through the grid would help fund the project.

The mid-Atlantic is ideally suited for offshore wind technology, the project's backers said, because the water remains relatively shallow 10 to 15 miles offshore—far enough out so that the wind turbines would be barely visible from land. This could address the "visibility" issues that have plagued the Cape Wind project on Nantucket Sound. [Based on a report in *The Washington Post*, October 13, 2010]

