



FACTS The Allure of Deepwater

Deep-water offshore wind is still in the research and development phase and is not economically viable. Future deepwater wind farms will require much more expensive multi-leg structures or floating platforms to withstand larger waves and storms than can occur in coastal waters. Advancements in cabling technology are also required to make these projects economically viable. Furthermore, this technology is being explored by energy companies which already have experience in offshore oil and gas platforms.

According to Greg Watson, Vice President of the Massachusetts Technology Collaborative, "A number of issues need to be addressed before economically viable electricity-generating wind facilities can be erected in the deep waters off the US. Our experts are confident they can be addressed, but not overnight, and not without the benefit of experience gained from shallow water projects."

Cape Wind is a stepping-stone for deep-water technology and this near-shore experience is essential to deep-water success. The first deepwater demonstration project was developed by Talisman Energy, an oil and gas producer in the North Sea. It consists of two newly designed five-megawatt (MW) wind turbines 14 miles off the Scottish coast in 150 feet of water. Perched on top of four-legged undersea lattice-type foundation structures, the two wind turbines provide power to nearby oil and gas platforms. They are not connected on land to power local communities.

Unlike the Cape Wind project, construction of the Beatrice project was heavily subsidized, receiving almost \$16 million in government funds for two turbines. In a cautious statement, Talisman Energy has said "current forecasts for electricity prices will never render this Demonstrator Project economic. It is an R&D project, not a commercial one, and as such requires public sector funding in order to proceed."

While the future of deep-water offshore wind energy is promising, the present viability of near-shore wind energy is real. The near-shore Cape Wind project can supply our short-term needs and lay the foundation for the coming of deep-water wind.

All evidence makes it clear that we cannot afford to wait. The mounting crisis of energy prices, national security concerns and global warming can be eased in part with the development of shallow water wind farms. Let's embrace the Cape Wind project, the flagship of our country's first offshore wind farm.