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Status of Cape Wind Offshore Wind Project

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Abstract

This is a summary to date of the current status of the Cape Wind Project, America's first offshore wind energy project. Basic project information from conception through permitting, construction, operation and maintenance is offered.

As this endeavor continues, a significant portion of the installation, operation and maintenance could utilize the resources, capability and creativity of the domestic offshore industry

To date, the domestic offshore industry has not had the opportunity to play a direct role in offshore wind farm construction, operation and maintenance. This paper introduces the reader to a large spectrum of likely consultants, suppliers, constructors and managers of offshore facilities

The paper provides information to a wide range of conferees on the background, status and needs of the emerging US offshore wind industry in general and the Cape Wind project in particular. It is expected to generate interest in multiple areas as a new source for potential business opportunities.

Introduction

This paper is meant to answer some of the most commonly asked questions such as:

- Who is Cape Wind?
- Why wind power?
- Why Nantucket Sound?
- What is the current status?

- What is the potential for offshore industry involvement?

Discussion

Cape Wind Associates LLC (CWA) is a limited liability company. Most of the members are the senior management of Energy Management Inc. (EMI) of Boston Massachusetts. EMI has provided services to develop, own, operate and maintain various projects over its thirty plus year history. The core group of investors in most of these projects has been consistent throughout.

In 2000, it appeared that natural gas fired generation in New England had reached saturation. Supply of natural gas would become increasingly tight and merchant power plants may be put at risk for fuel supply. The core group decided to test the market for sales of its assets in natural gas fired power plants. With 830 MW of generation, it became apparent that these assets were more valuable to entities with larger portfolios and were sold.

Projects developed in the past had always been on the cutting edge of technology and the most environmentally "clean" power plants of their time. We developed both the first independent power plant in New England and the first pure merchant plant in the US.

The next logical step was to develop a completely emission free energy plant. Both the Commonwealth of Massachusetts (through the Renewable Portfolio Standard) and the federal government (through the Production Tax Credit) provided incentives to develop renewable energy facilities. This combination fit with the model of projects we had developed in the past. We began to look for the most appropriate technology to serve this purpose. We studied various renewable technologies including wave, solar tidal and wind power.

The only technology that appeared to satisfy our goal of developing a utility scale facility that would be commercially viable was wind power.

The next challenge was to find workable locations to evaluate as potential sites. A review of wind regimes in New England revealed that the only general areas with