Offshore Wind
Downstate NY’s Lowest Cost Clean Energy Option

May 21, 2012
Capital

**DE Shaw & Co**
- >$25B of investment and committed capital
- Specialized expertise within the energy sector
- Majority investor

**firstwind**
- 5,500+ MW portfolio
- 700+ MW operating

Technical

- Focused on projects located 15+ miles from shore, where visual and environmental impacts are minimized
- Designing projects using steel piled jacket foundations suitable for up to 180’ for water - now the standard for deep water wind farms in Europe
- Achieving lower unit costs through the use of larger turbines in larger projects, combined with innovative transmission network designs.
• New York
  – 1,000 MW Hudson Canyon Wind Farm to serve NYC, Long Island, and NJ markets
  – SMRT Line transmission network connects wind farm with NYC and NJ. 550 MW interconnection queue position at Gowanus Substation
  – Selected as priority project in NYC Regional Economic Development Council Plan

• New England
  – Chosen as RI's preferred developer
  – Two projects:
    • 30 MW project near Block Island
    • 1,000 MW project in federal waters
  – NELI transmission network connects federal waters project with both Long Island and New England
  – Partnering with Siemens on Block Island
  – Received RI PUC approval for a 20-year PPA with National Grid

• New Jersey
  – 1,000 MW project off of South Jersey
  – JV with PSEG
Evolution of Turbine Technologies & European Market

- European Offshore Wind Market Today: 3,800 MW operating and 19,000 MW contracted for and under development.
- Wind Farm Sizes increase:
  - 1st Gen, 10-300 MW
  - 2nd Gen, 100-600 MW
  - 3rd Gen, 1,000-9,000 MW
- 5 MW turbines now standard. 6-8 MW under development.
- A number of projects have used turbines of 5 MW or larger, signaling that financing institutions are willing to invest in the large turbines.

Source: Number of offshore wind MWs connected in 2009 and 2010 and under construction: Giraffe Energy Bankers, Presentation at Offshore WindPower USA, Boston, MA Feb. 2010.
• Selected as preferred developer by the state of RI. Location supported by MOU between RI & MA

• DWEC Wind Farm – 1,000+ MW

• 30 miles east of Montauk

• DWEC lease application submitted to US Department of Interior December 2010

• New England – Long Island (NELI) transmission network connecting to Long Island and New England
New York Offshore Wind Sites

Figure 2
Regional Overview

Sources: ESRI GIS Data, NOAA, MMS