



Beacon Power Corporation

Flywheel-based Solutions for Grid Reliability

May 2006



Safe Harbor Statement



This presentation contains forward-looking statements, including the Company's beliefs about its business prospects and future results of operations. These statements involve risks and uncertainties. Among the important additional factors that could cause actual results to differ materially from those forward-looking statements are risks associated with the overall economic environment, the successful execution of the Company's plan of operation, changes in the Company's anticipated earnings, continuation of current contracts, changes in gaming and other applicable regulations, and other factors detailed in the company's filings with the Securities and Exchange Commission, including its most recent Forms 10-K and 10-Q. In addition, the factors underlying Company forecasts are dynamic and subject to change and therefore those forecasts speak only as of the date they are given. The Company does not undertake to update them; however, it may choose from time to time to update them and if it should do so, it will disseminate the updates to the investing public.

Our Mission



To deliver flywheel-based solutions to improve the performance and sustainability of the electricity grid



Market Information



Nasdaq symbol	BCON
Average daily volume	2.0 million
52-week low/high	\$0.82 – \$5.35
Shares outstanding	60 million
Market capitalization	\$90 million

(\$1.55 as of 8 May 06)

Investment Highlights



- **Energy technology investment play**
- **Proprietary technology to optimize the grid**
- **Grid operators providing developmental support**
- **Minimal market risk – large “open” market**
- **Many additional applications beyond grid support**

Business Overview



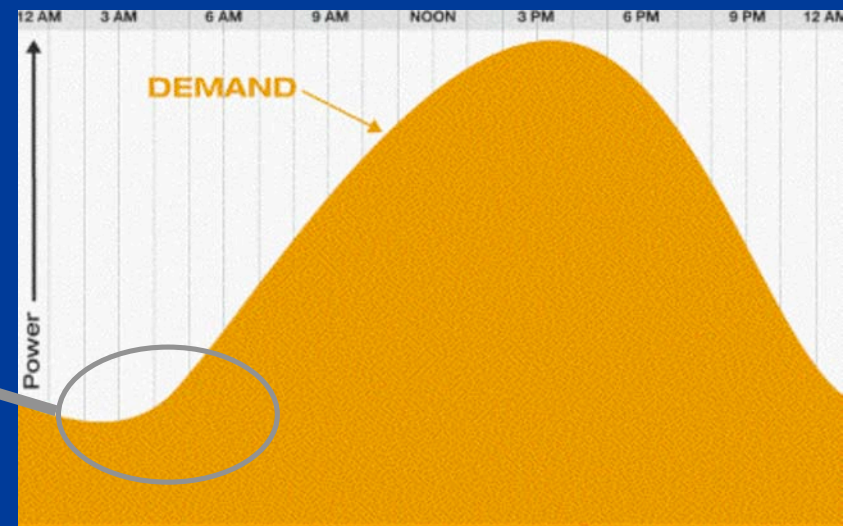
- Frequency regulation services for the grid based on unique, patented flywheel energy storage
 - Open 2005 market > \$600 million/yr and growing
 - Proven design with over 500,000 hours in the field
 - Better performance, clean energy, no fuel required
- Numerous additional applications once Gen4 flywheel is in production

What is Frequency Regulation?

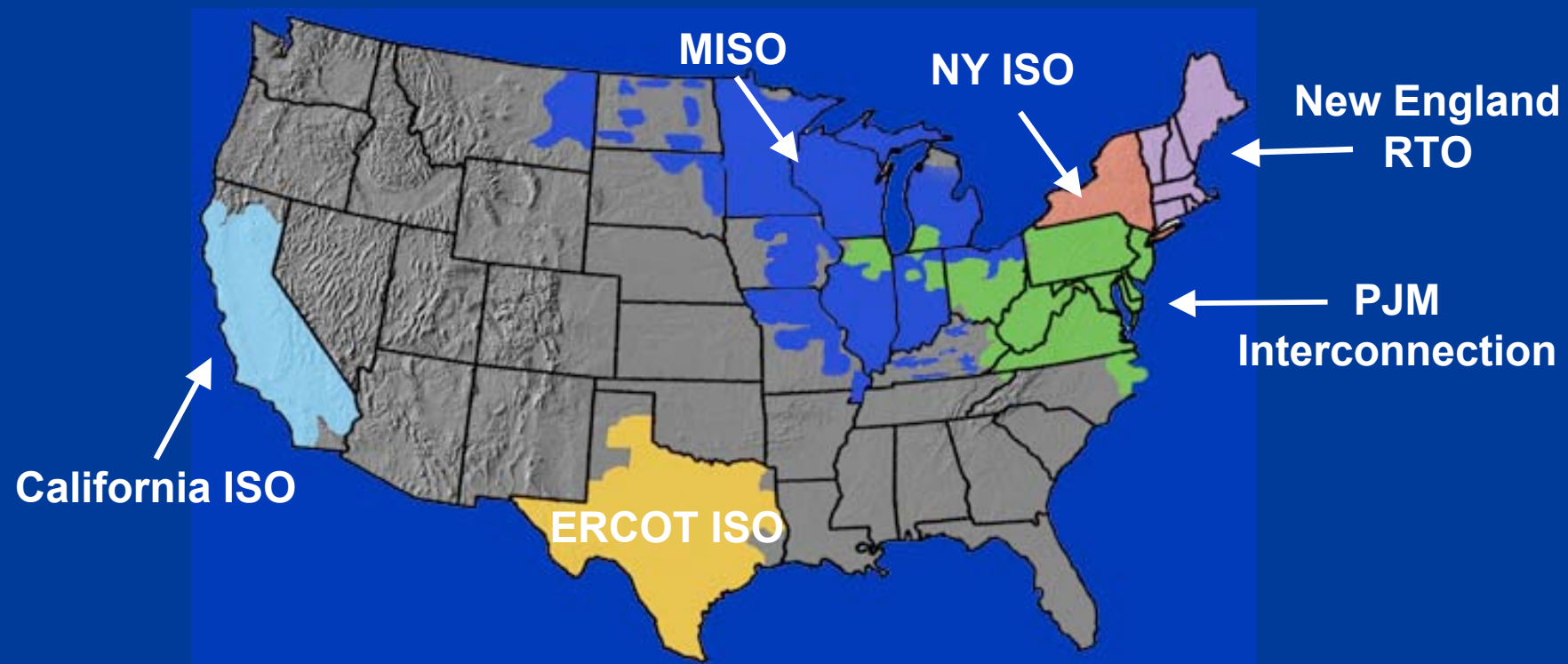


(A two-minute animation)

Also available on www.beaconpower.com



U.S. Markets for Regulation Services



- Open frequency regulation markets: >\$600 million in 2005
- PJM services grew from \$139 mil. to \$422 mil. in 3 yrs.
- MISO (Midwest ISO) expected to be approx. equal to PJM

Renewables Drive Regulation Demand



- There is significant growth in wind generation driven by state renewable portfolio standards
- Wind and solar introduce fluctuations in generation, adding to grid instability
- Increases regulation requirement (per MW power demand) versus traditional sources

How the Market Works



(A two-minute animation)

Also available on www.beaconpower.com

Flywheel Product Evolution



2000



Gen 1
Telecom
2 kWh / 1 kW

2001



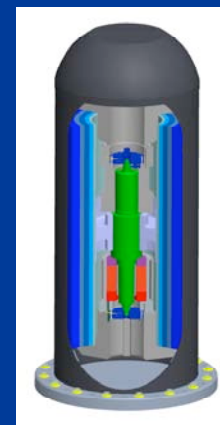
Gen 2
Telecom
6 kWh / 2 kW

2004



Gen 3
Grid
6 kWh / 15 kW

2006



Gen 4
Grid
25 kWh / 100 kW

- Telecom applications
- Over 500,000 hours of operation

2005



100kW
demonstration unit

2007



1st MW operational
in commercial service

Smart Energy Matrix: How It Works



- SEM recycles energy to stabilize the grid
- The SEM can be attached to the grid almost anywhere – lack of emissions makes permitting simple
- SEM is automatically operated via internet-based signals from the grid operator
- Regulation addresses instantaneous imbalances – the SEM can respond in 1/100th of the time provided by traditional suppliers

Compelling Economic Value



- Bids and payments are in 1 MW increments
- Each MW of service would produce >\$420K revenue per year (2005 PJM pricing)
- A 20 MW plant would produce approx. \$8 million
- Cost per MW (in volume) approx. \$1 million
- 80% EBITDA – zero fuel consumed, high operating efficiency and minimal maintenance required
- Equipment designed for 20-year life

SEM Business Strategy

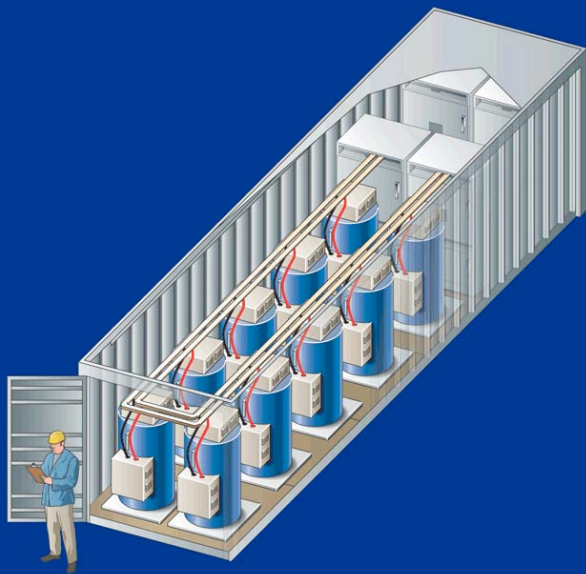


- Use service model instead of selling product
- Address established market and pricing
- Offer regulation services directly to grid operators
- Qualify with demonstration testing now underway
- Commercialize with 25 kWh Gen 4 flywheel
- Maximize project financing to minimize dilution

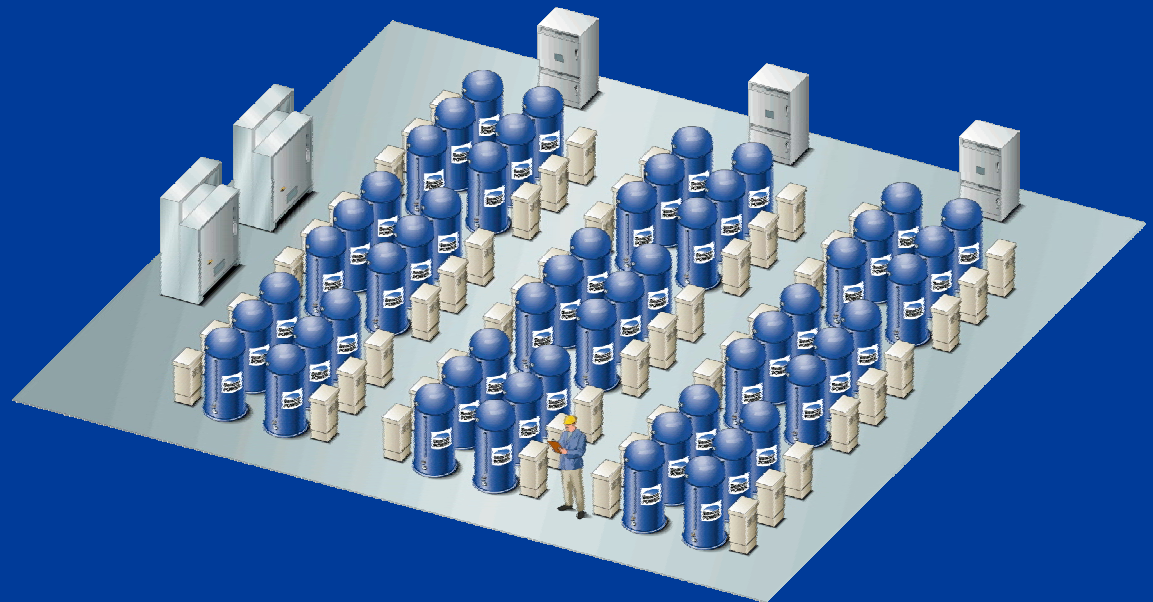
Smart Energy Matrix – Modular Design



- Sized in 1-MW increments; can be built out to 20 MW or more
- Multiple units results in high availability through redundancy
- Small units would be factory built; large plants - site built



One MW SEM



Five MW SEM

Smart Energy Matrix 20 MW Plant



Existing Solutions vs. SEM

Hydropower

- Good performance
- Seasonal and rainfall limitations
- Very limited growth in supply with older assets decommissioned
- Regional solution

Fossil Fuel

- Secondary use of equipment used primarily for generation
- Regulation use increases emissions, lowers efficiency and increases maintenance costs
- Old steam plants are being decommissioned
- Addition of emissions equipment reduces percent of output available for regulation services

Smart Energy Matrix

- Designed specifically for optimal regulation performance
- High reliability; 20-year projected life
- Lowest operational cost
- Emission-free, clean technology
- Fast response may offer additional benefits

Performance Demonstrations



- \$2 million in contracts received from CA Energy Commission and NYSERDA
- Two Smart Energy Matrix demonstration systems now operating (100 KW systems)
- Objectives
 - Demonstrate frequency regulation functionality using Gen 3 flywheels
 - Validate monitoring and control hardware and software
 - Gain approval for commercial service (using Gen 4 flywheel systems)



San Ramon, CA



Amsterdam, NY

Additional Potential Markets



- Interface distributed generation with the grid
- Satellite energy storage
- Naval “electric ship” energy storage
- Rail systems (recycle energy, support voltage)
- Oil and gas exploration (reduce onboard generation)
- Container cranes (recycle energy, support voltage)
- Off-grid (telecom, residential, industrial)
- Uninterruptible Power Systems (UPS)



Beacon Power Milestones

- **2004 – Finalized frequency regulation concept and joined PJM**
- **Feb 05 – Signed contracts with California and NY**
- **Sep 05 – Shipped first SEM system to California**
- **Nov 05 – Received \$15 million new investment**
- **Mar 06 – Shipped SEM system to New York**
- **2006 – CA and NY demonstrations will show that the SEM can provide frequency regulation**
- **Q4 '06 – First operational 25kWh flywheel**
- **Q4 '07 – First revenue-generating SEM**

Management Team



Name	Title	Experience
Bill Capp	CEO	Over 25 years' experience with Ford Motor, Ingersoll-Rand, York International
James Spiezio	CFO	Over 25 years' experience with GE, United Technologies
Matt Lazarewicz	CTO	Over 25 years' experience with GE
Chet Lyons	Mrktg & Sales	20 years' experience incl. American Superconductor, Evergreen Solar

Since 2002, Beacon employees have taken bonuses in stock rather than in cash

Investor Highlights Summary



- **Provide Frequency Regulation Services**
 - Based on proven, proprietary clean technology
 - Immediately available established market
 - Low cost provides attractive economics
 - Worldwide market, growing with wind deployment
- **Sell product into additional markets**
(once Gen 4 flywheels are in production)