



Blackout May Spur Growth of Renewable Energy Sector

by Rona Fried, Ph.D.

Shares of many renewable energy companies surged late this summer when the largest blackout in North American history renewed interest in distributed energy and a more efficient grid.

Westborough, Massachusetts-based American Superconductor Corp. (AMSC), whose superconductor cables eliminate grid inefficiencies, closed at \$13.20 a share on August 15, up 43 percent from its close at \$9.25 a share on August 14, which made it the second highest percentage gainer on Nasdaq for that day. AMSC's competitor, Intermagnetics (IMGC), headquartered in Latham, New York, gained 20 percent.

Fuel cell company shares spiked too. For example, Proton Energy Systems (PRTN) of Wallingford, Connecticut, rose 18 percent; Plug Power (PLUG) of Latham, New York, grew 23 percent; and ECD Ovonic (ENER) of Rochester Hills, Michigan, jumped 18 percent. Fuel Cell Energy (FCEL) of Danbury, Connecticut, and Quantum Fuel Systems Technologies Worldwide (QTWW) of Irvine, California, also jumped. [Editor's Note: According to *Reuters*, ENER announced on September 24 that its annual report would be delayed, and auditors could question the company's viability unless it lined up additional financing. This news triggered a sell-off in the company's stock.]

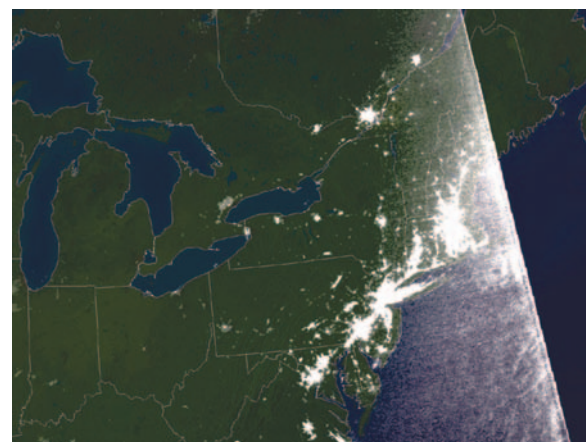
Experts Expect Growth

I asked Patrick McVeigh of the financial advisory firm of Lowell, Blake & Associates and Eric Becker of the socially responsible investment firm of Trillium Asset Management, both based in Boston, Massachusetts, as well as Bob Preston of the Bedford, New York-based investment firm of CraigMillar Energy, to give us their take on the situation.

All three experts believe the blackout is a material event and will spur the growth of alternative energy technologies. Becker expects it to result in increased federal

funding for energy reliability, which will help the superconductor companies. "The stocks may have gone up more than is appropriate because of the blackout, but I think there's a legitimate reason behind the stocks that went up," Becker says.

Preston notes that although we may hear about power loss only when it affects 50 million people, it is a recurring, serious issue for businesses now. "Businesses will find ways to ensure against loss of revenue and capital from intermittent, brittle grid power," he points out. "Companies



PHOTOS COURTESY NOAA/DMSF

Aug. 15, 2003 — NOAA posted online satellite images taken during and after the historic blackout of the northeastern United States, which plunged millions of people into darkness.

that have a clear vision of sustainable energy will demand a greater valuation that could reward investors. We've heard

a lot about the move toward a hydrogen-based energy structure, but it still hasn't garnered the type of enthusiasm it deserves. The blackout is a wake-up call."

"I would wait to buy many of the alternative energy stocks because they just had a nice run and will probably come down in price—especially those that jumped based on what may happen over the next three, five or 10 years," says McVeigh. "FCEL's price is still attractive because it was significantly undervalued prior to the blackout."

When prices tend to jump up on sentiment, as they do during an event like a blackout, Preston uses it as a selling rather than a buying opportunity. If you own American Superconductor, for example, you might want to take some profits since it jumped so high, he says.

Companies to Focus On

More than 300 publicly traded companies are working on energy-related solutions. Which companies might sustainable investors focus on?

Among the two superconductor companies, these experts continue to express more confidence in Intermagnetics.

"American Superconductor went up more because it's the pure play, but I think they are in a precarious position," explains Becker. "They are burning through too much cash and may have a tough time surviving. They may make it with enough government subsidies, but I'm not convinced they have the technology to get to commercialization. IMGC is still relatively cheap because there's still little value being placed on its superconducting power division. Most of the value in the stock

reflects the MRI (healthcare) division." (see *Progressive Investor* issues 4 and 9 for more on IMGC).

Preston agrees. "IMGC didn't move as much as AMSC because they have a profitable on-going healthcare business making MRI machines," Preston says. "It gives investors an 'option' on the grid technologies. We own IMGC, but not American. It's not clear when utilities will invest in this technology. At a recent utility conference there was no mention

of advanced technologies; the focus was on cost-cutting."

McVeigh is not as interested in IMGC. "Intermagnetics may have a product five years from now, but I'm much more interested in companies that have products now, like FCEL," he says. "For some businesses,

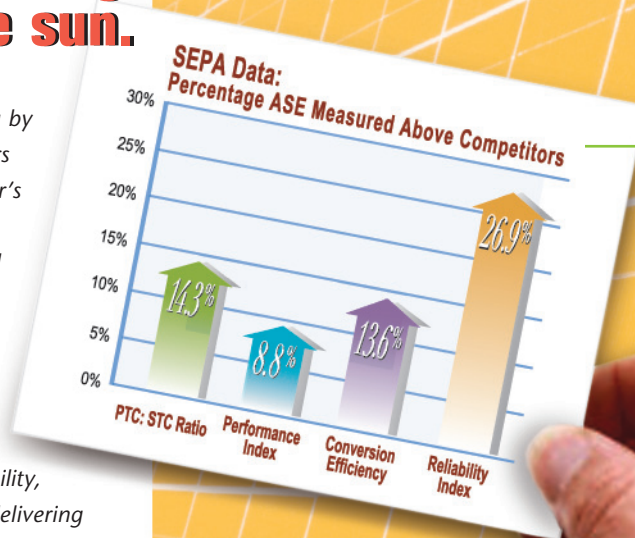
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like hotels, the blackout could be the catalyst to take the leap and purchase a fuel cell now for backup."

McVeigh thinks fuel cell and wind companies—that have products right now but have been waiting for a market—should benefit the most. The blackout will certainly push the U.S. energy bill along—the key for wind stocks. "We like [Denmark-based] Vestas much more than the other wind stocks because it has a better balance sheet and its market share is growing in Europe, particularly in Germany. They had a very good quarter in terms of earnings."

Vestas hasn't been doing as well in the U.S. because of the stalled energy bill and because General Electric (GE) is doing so well here. GE has a long-term relationship with Florida Power & Light (FPL) in the conventional energy business, which they are leveraging on the renewable energy side. Instead of selling generators to FPL, they sell wind turbines. McVeigh thinks Vestas will do well in the U.S. when the energy bill passes. Vestas' valuation is still decent at 17, he says.

Fuel cell companies will likely be recipients of increased subsidies, according to Becker. "The blackout raises awareness of the need for backup power supplies, and fuel

cell products are getting close enough that more subsidies will lead to more installations. This will accelerate the path to commercialization by building demand and production volume to help bring costs down."

Among the fuel cell companies, Preston is impressed with Proton Energy Systems (PRTN), the leading company that converts water into hydrogen through electrolysis. Currently, they are in the hydrogen delivery business, not the energy business. They supply hydrogen to industries like the semiconductor industry, where it is used as part of the manufacturing process. Rather than delivering hydrogen in a canister by truck, they make it right at the production line.

"Eventually this is what will be used to fill hydrogen cars, but first it will be used in these industrial processes and next in stationary applications—backup systems," Preston explains. "Many cell phones didn't work during the blackout; telecommunications companies need to upgrade their backup systems. Proton can provide a system that competes with a battery or a diesel engine."

"Their management is excellent," he continues. Robert Shaw, one of the gurus in distributed-energy venture capital, invested in Proton (along with Evergreen Solar).

Hydrogen needs to be stored so it can be used when it is needed. On the storage side, Preston likes Eatontown, New Jersey-based Millennium Cell (MCEL)—a tiny company that has patented a process to store hydrogen in borax. "The military applications to supply fuel for M2/M3 Bradley Tanks in the field are compelling," he says. "Hydrogen can be dropped in bags from a helicopter!" Preston also likes Quantum Fuel Technologies (QTWW), backed by General Motors, which makes lightweight tanks to store hydrogen.

Overall, while the blackout caused significant problems and pointed out weaknesses in the U.S. electricity grid, it is having a positive effect in spurring the growth of some alternative energy technologies. ☺

Rona Fried, Ph.D., is president of SustainableBusiness.com. This article is an excerpt from an article featured in Progressive Investor, a newsletter on sustainable investing. It is oriented toward investors in both public and private cleantech companies and companies interested in raising capital. Progressive Investor is an email newsletter available by subscription at www.sustainablebusiness.com.