

Summary:

For the October 21st issue of NAATBatt's Advanced Battery Weekly, we highlight the ongoing sector activities.

Executive Director James Greenberger suggests that distributed energy storage could be the “killer app” that jump starts investment in smart grid technology. Read “***The Curious Disconnect Between Smart Grid and Energy Storage***” in the Executive Director's Notes portion of this newsletter below.

The NAATBatt and Asia Indices were up 4.7% and 7.7%, respectively. The U.S. Index declined 2.9%. The S&P500 and Russell 2000 were both relatively flat.

Key Highlights:

- **Fisker Automotive** announced it has commenced sales of the **Karma** after having received certification from the **US Environmental Protection Agency (EPA)**. A Karma driver with a 40-mile commute who starts each day with a full battery charge will only need to visit the gas station about every 1,000 miles and would use just 9 gallons of gasoline per month.
- **NEC** has developed a lithium-ion (li-ion) battery technology that doubles the life span of conventional models. The new batteries could hold 83% of their original charge after 23,500 cycles – which the company has equated to over four years of standard use.
- The **DeLorean Motor Company** has announced plans to build an all-electric version of the stainless steel gull-wing sports car. The company has teamed with **Flux Power**, a battery manufacturer that has branched out into the business of developing electric vehicles (EVs).
- Ten states from **Massachusetts** to **Maryland** are joining forces to promote EVs. The **Northeast Electric Vehicle Network (NEVN)** announced it will work to help plan and install charging stations throughout the region as well as attract private investment in clean vehicle infrastructure.
- **Coulomb Technologies** and **Car Charging Group** announced an extension of their collaboration for their national rollout of 1000 charging stations powered by the **ChargePoint Network**. Car Charging Group will also use the cloud-based charging solutions to manage its national network of customers that includes: **Walgreens, Central Parking, Icon Parking, Centro Properties, Laz Parking** and **Ace Parking**.
- The first 100 people to buy an EV will get a \$200 rebate from the city of **Glendale, CA** in exchange for installing a special socket that will help measure the potential impact of more cars tapping into the power grid. EV purchasers who want to charge their car faster must hire an electrician to install a 240-volt socket, for which the city will be installing special meters to measure the energy use.
- **Hitachi** is adding 60 jobs at its **Mercer County, KY** plant to make li-ion battery packs. Production of the battery packs is expected to begin at the **Harrodsburg** plant in 2012, with shipment beginning in 2013.
- The **Department of Energy (DOE)** has endorsed to the **Department of Finance** a request by **Newgen Electric Technologies** to import electric buses (ebuses) at zero taxes and duties. The company's first import could prove to be a ‘proof-of-concept’ for investors who may want to produce ebuses in the **Philippines**.

- **Pellissippi State Technical Community College** has added charging stations at its main campus on **Hardin Valley Road** and at its **Magnolia Avenue** campus in **East Knoxville, Tennessee**. There are two stations at each site.
- **Chargemaster** and **Telefonica (O2 UK)** announced a collaboration to provide EV charging services. The agreement has O2 providing M2M (machine-to-machine) technology to connect Chargemaster's UK-wide network of electric vehicle charging stations.
- **Northern Indiana Public Service** has developed a plan as part of a settlement between the company and the **U.S. Environmental Protection Agency** over **Clean Air Act** violations that would provide incentives for EV owners to install home charging stations. The company's plan would provide vouchers of up to \$1,650 to 250 residential customers for installing 240-volt charging stations at their homes.
- **Queen's University in Kingston, Canada** has acquired an electric service truck (etruck) and announced plans to possibly increase that number to create a fleet of sustainable vehicles. The **Greentruck EVR1000** is powered by a 72-volt lead acid battery system and has a battery life (not range) of up to 50,000 kilometers (over 31,000 miles).
- Two charging stations were unveiled at the **King of Prussia Mall, PA**. The King of Prussia installation is one of numerous initiatives by **350Green**.
- The **Federal Energy Regulatory Commission (FERC)** has issued a final ruling on frequency regulation compensation in organized wholesale power markets. The Commission is removing unduly discriminatory and preferential practices from **Regional transmission organization (RTO)** and **independent system operator (ISO)** tariffs and requiring the setting of just and reasonable rates.

A Few More Details:

Fisker Automotive announced it has commenced sales of its 2012 model year Karma sedan (as shown in **Exhibit 1**) after having received certification from the U.S. EPA. The Karma's all-electric range was found to be 32 miles by the EPA under its test criteria. A Karma driver with a 40-mile commute who starts each day with a full battery charge will only need to visit the gas station about every 1,000 miles and would use just 9 gallons of gasoline per month.

Source: Fisker Automotive

Exhibit 1: The Fisker Karma



Source: Auto Evolution

NEC has developed a li-ion battery technology that doubles the life span of conventional models. The new technology will be used in large batteries for applications such as electrical power systems in buildings and homes. The new batteries could hold 83% of their original charge after 23,500 cycles – which the company has equated to over four years of standard use. NEC estimates that the new technology could produce batteries that can maintain 50% of their original charge for about 33 years, or over twice the 15-year mark of batteries now in use. The batteries use an organic sulfur compound to help prevent the buildup of internal resistance in lithium batteries that gradually cuts their power output and life span.

Source: IDG

The DeLorean Motor Company has announced plans to build an all-electric version of the stainless steel gull-wing sports car (as shown in **Exhibit 2**). The company has teamed with Flux Power, a battery manufacturer that has branched out into the business of developing EVs. The DeLorean will use a 32 kilowatt-hour (kWh) battery with a fiberglass underbody that has been re-engineered with a lighter, stronger composite. The final weight of the car should be only about 200 pounds more than the original.

Exhibit 2: Going Electric



Source: DeLorean Motor Company

Ten states from Massachusetts to Maryland are joining forces to promote EVs. The NEVN announced it will work to help plan and install charging stations throughout the region as well as attract private investment in clean vehicle infrastructure. The 10 states are Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont. Maine is participating in the Transportation and Climate Initiative that is collaborating with the new network, but is not part of the network.

Source: Associated Press

Coulomb Technologies and Car Charging Group announced an extension of their collaboration for their national rollout of 1000 electric vehicle (EV) charging stations powered by ChargePoint® Network. Car Charging Group will also use ChargePoint Network cloud-based EV charging solutions to manage its national network of customers that includes: Walgreens, Central Parking, Icon Parking, Centro Properties, Laz Parking and Ace Parking. ChargePoint Service Plans include features such as: 24/7 driver support, flexible pricing, automated billing, remote station upgrades and integration with existing billing and IT systems. This allows Car Charging Group to maximize parking space utilization and offer charging session reservations.

Source: Car Charging Group

The first 100 people to buy an EV will get a \$200 rebate from the city of Glendale in exchange for installing a special socket that will help measure the potential impact of more cars tapping into the power grid. EV purchasers that want to charge their car faster must hire an electrician to install a 240-volt socket, for which the city will be installing special meters to measure the energy use. But the meters need a special connection that the electrician will be required to install — typically at a cost of \$200 — hence the rebate offer.

Source: Los Angeles Times

Hitachi is adding 60 jobs at its Mercer County, KY plant to make lithium-ion (li-ion) battery packs. The company last year announced it was creating 145 new jobs in Harrodsburg making sophisticated automotive electronics. The announcement Monday adds production of the battery control electronics. Production of the battery packs is expected to begin at the Harrodsburg plant in 2012, with shipment beginning in 2013.

Source: Lexington-Herald Leader

The DOE has endorsed to the Department of Finance a request by Newgen Electric Technologies to import ebuses at zero taxes and duties. The company's first import could prove to be a 'proof-of-concept' for investors who may want to produce ebuses in the Philippines. Currently, taxes and duties account for about 30% of their prices making it unattractive for consumer or public transport use.

Source: The Manila Times

Pellissippi State Technical Community College has added charging stations at its main campus on Hardin Valley Road and at its Magnolia Avenue campus in East Knoxville, Tennessee. There are two stations at each site. Drivers with a vehicle compatible with the station (Chevy Volt and Nissan Leaf) can use it at no cost for the service.

Source: Knoxville News Sentinel

Chargemaster and Telefonica (O2 UK) announced a collaboration that they will be working together to provide EV charging services. The agreement has O2 providing M2M technology to connect Chargemaster's UK-wide network of electric vehicle charging stations. The Polar network is the UK's largest private sector-funded national charging network and has been developed by Chargemaster in close collaboration with motor manufacturers. The agreement combines Chargemaster's experience in

electric charging with O2's mobile expertise with a goal to provide simple and helpful solutions for customers to help stimulate the adoption of EV charging services.

Source: Mobile Today

Northern Indiana Public Service has developed a plan as part of a settlement between the company and the U.S. Environmental Protection Agency over Clean Air Act violations that would provide incentives for EV owners to install home charging stations. The plan is under review by Indiana utility regulators. The company's plan would provide vouchers of up to \$1,650 to 250 residential customers for installing 240-volt charging stations at their homes and any customer who installs a separate meter at their home for vehicle charging could power their cars for free for three years between 10 PM and 6 AM.

Source: Chicago Tribune

Queen's University in Kingston, Canada has acquired an electric service truck (etruck) and announced plans to possibly increase that number to create a fleet of sustainable vehicles. The Greentruck EVR1000 (as shown in **Exhibit 3**) is a crew-cab pickup truck seating up to four passengers, produced by Vantage Vehicle International. The etruck is powered by a 72-volt lead acid battery system and has a battery life (not range) of up to 50,000 kilometers (over 31,000 miles). The university tested the truck for six weeks this past summer to evaluate its usability for the three departments that may use electric vehicles in the future: Parking, Security, and Maintenance.

Exhibit 3: The First Etruck in Use at Queen's University



Source: Kingston Herald

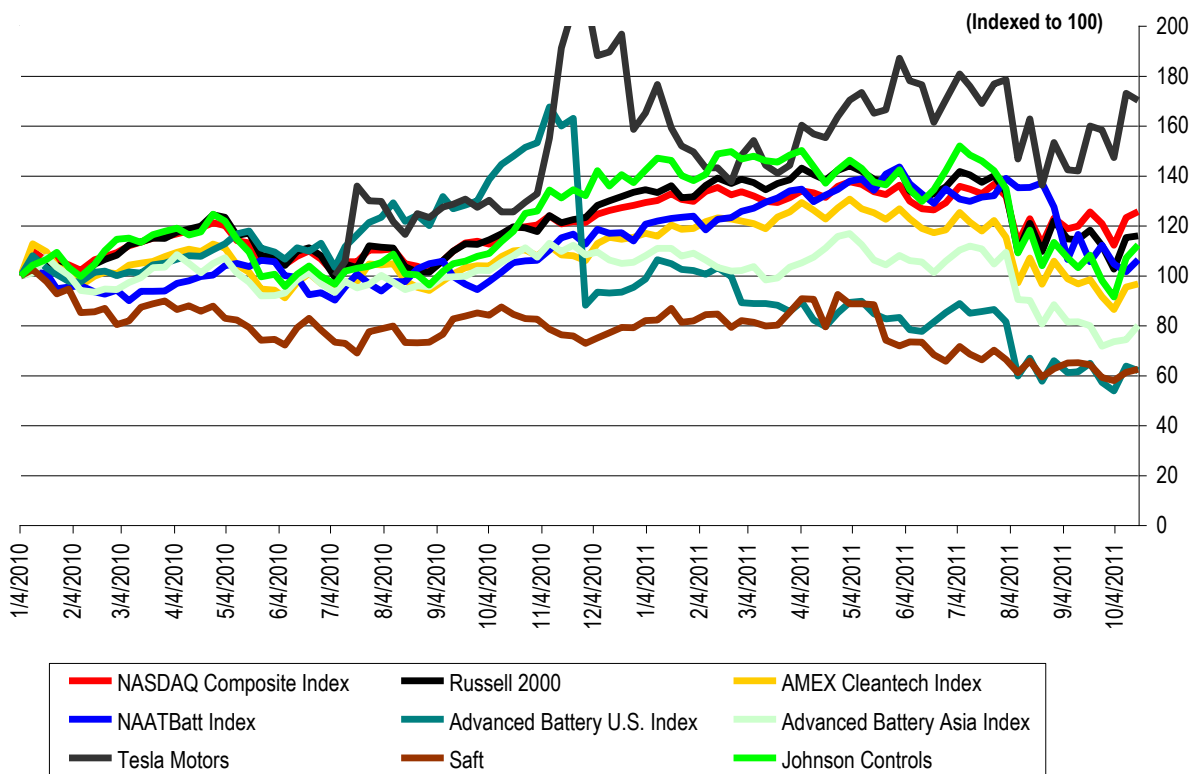
Two charging stations were unveiled at the King of Prussia Mall, PA. The King of Prussia installation is one of numerous initiatives by 350Green. The company has performed consumer research, and found that Volt drivers charge much more frequently than others, their gasoline engines notwithstanding.

Source: The Inquirer

The Federal Energy Regulatory Commission (FERC) has issued a final ruling on frequency regulation compensation in organized wholesale power markets. Specifically, this Final Rule requires RTOs and ISOs to compensate frequency regulation resources based on the actual service provided, including a capacity payment that includes the marginal unit's opportunity costs and a payment for performance that reflects the quantity of frequency regulation service provided by a resource when the resource is accurately following the dispatch signal.

Source: FERC

Exhibit 4: Indices Performance
(From January 4, 2010)

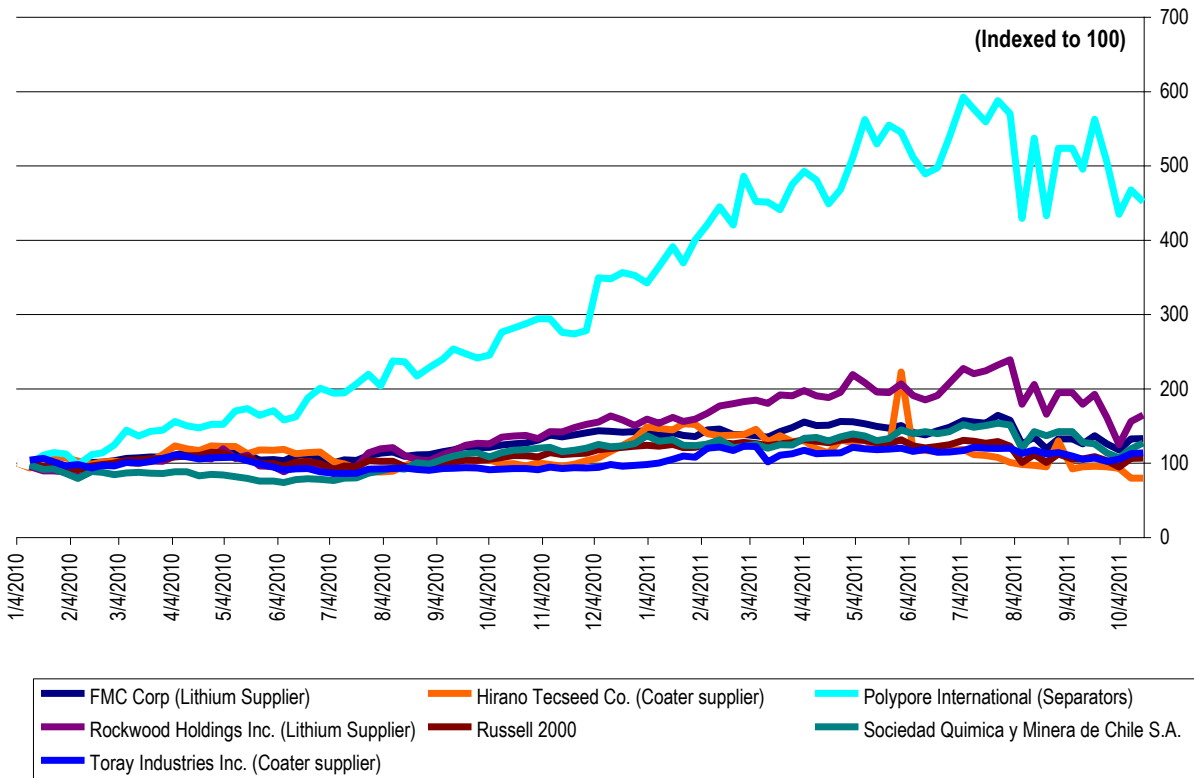


Index	Close on 10/17/2011	52-Wk High	% of 52-Wk High	Performance		
				LTM	YTD	Week
Dow	11,397.0	12,928.5	88.2%	3.0%	(2.3%)	(0.3%)
S&P 500	1,200.9	1,370.6	87.6%	2.0%	(5.6%)	0.5%
NASDAQ	2,614.9	2,887.8	90.6%	5.9%	(2.8%)	1.9%
Russell 2000	688.6	868.6	79.3%	(2.1%)	(13.8%)	0.5%
AMEX Cleantech Index	948.9	1,298.6	73.1%	(11.9%)	(17.4%)	1.3%

Source: Bloomberg and ThomsonOne

Note: The select NAATBatt Index is a market-value-weighted average and includes ALTI, BASF, COP, ENS and XIDE. The Advanced Battery U.S. Index is a market-value-weighted average and includes HEV, MGA, MXWL, UQM and VLNC. The Advanced Battery China Index is a market-value-weighted average and includes BYD, CBAK, GS Yuasa, LG Chem and Panasonic.

Exhibit 5: Supplier Performance
(From January 4, 2010)



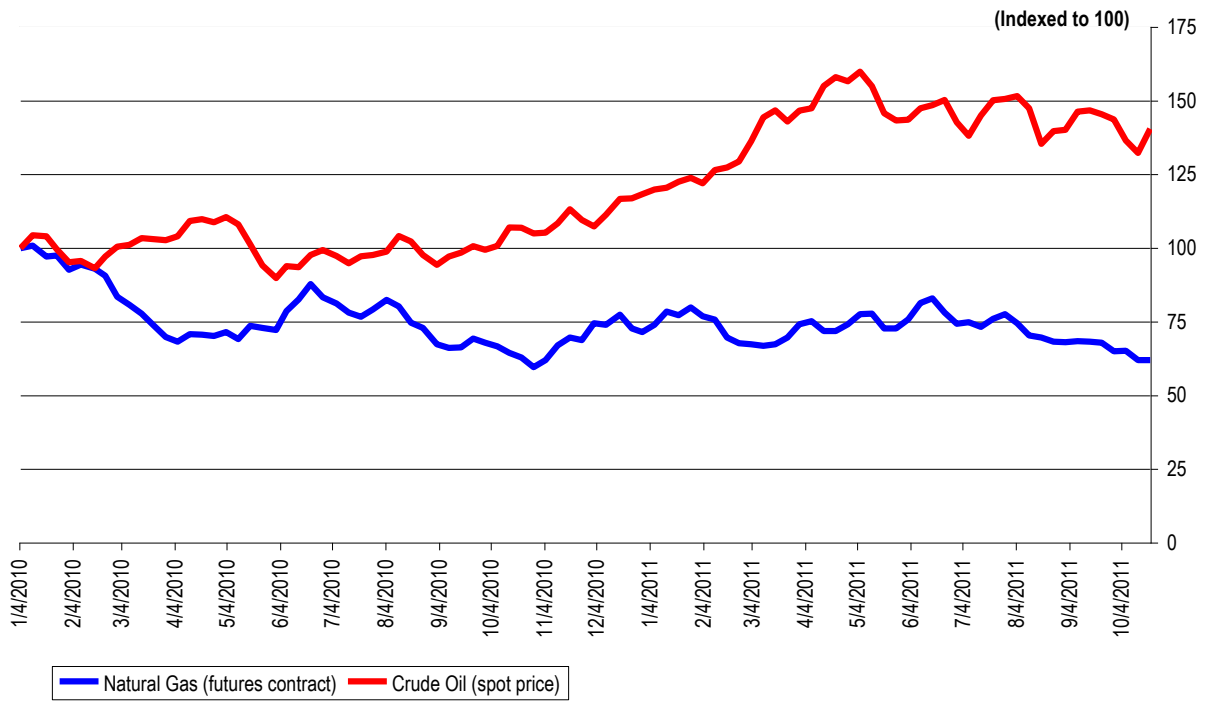
Source: Bloomberg

Exhibit 6: Commodity Prices

Commodity	Price on 10/17/2011	Price on 10/10/2011	Price on 9/16/2011	1 Week Change	1 Month Change
LME Copper (Cash, \$ per tonne)	7,565	7,313	8,781	3.4%	(13.8%)
LME Lead (cash, \$ per tonne)	1,990	1,976	2,425	0.7%	(17.9%)
LME Nickel (cash, \$ per tonne)	18,750	18,830	21,700	(0.4%)	(13.6%)

Source: LME

Exhibit 7: Natural Gas and Crude Oil
 (From January 4, 2010)



Source: EIA

Executive Director's Notes



THE CURIOUS DISCONNECT BETWEEN SMART GRID AND ENERGY STORAGE

I had the pleasure this week of attending two conferences, the ESAT conference on energy storage systems in San Diego and the Great Lakes Symposium on Smart Grid in Chicago. Both conferences were excellent. But I finished the week with an uneasy feeling that while smart grid advocates and storage advocates are both trying to address the same problems, they are talking about different solutions and not talking enough about each other.

The reluctance of smart grid proponents to talk about storage seems to be a function of the fact that while much of smart grid technology is focused on providing demand response by changing customer behavior (through better communications and price signals), energy storage (at least of the distributed variety) provides demand response by divorcing the customer from load and making the timing of customer electricity demand largely irrelevant to the grid.

Both approaches have merit and will ultimately have their place on the smart grid. Demand response is an established strategy for leveling load. There is no question but that the cheapest way to level load is to persuade electricity consumers to turn on and off their electrical appliances, whether they be heavy machinery, air conditioners, or electric vehicles, at exactly the right times. This is what smart grid advocates euphemistically call "empowering the consumer".

Yet as a succession of speakers at the smart grid conference talked about how wonderful it is that the smart grid is going to empower consumers, I could not help but wonder whether those speakers appreciated the vaguely Orwellian irony of what they were saying. Demand response is not, of course, really about empowering anybody. It is about persuading electricity consumers to behave in a way they would prefer not to behave by imposing on those consumers a system of economic rewards and punishments. Ivan Pavlov would understand the real function of a smart meter, and so will most consumers.

As a consequence, one of the other recurring themes of the smart grid conference was the need to educate consumers. More than a few speakers made reference to the long road ahead in educating consumers citing, among other things, the pushback that many utilities have received on smart meter projects. What is needed, it was suggested, is a smart grid "killer app" that will engage consumers and make them interested in managing their electricity load--let alone in paying for the billions of dollars of improvements needed to make the grid smart.

Unfortunately, smart grid proponents focused on demand response are going to be waiting a long time for their “killer app”. The problem is not the absence of an interesting gadget or game to engage consumers, but that the whole concept of demand response is, by definition, consumer unfriendly. Steve Jobs himself could not sell a gadget the purpose of which was to meet the needs of the gadget maker rather than to meet the needs of the consumer.

The smart grid will not find popular acceptance until its proponents can explain to consumers exactly what benefit they will get out of the smart grid today. Promises of future jobs and cost savings may be valid, but they are unlikely to persuade a skeptical public incline to group utility promises with those of lawyers, used car salesmen and investment bankers. If the smart grid is going to be sold to average residential electricity customers, it needs to be sold differently.

Selling the smart grid requires that we change the way we think and talk about the problems of the electricity grid today. The fact that the grid is stressed by variable renewable energy generators and peak loads should not be seen as the fault of consumers for using electricity at the wrong times; it should be seen as technological flaw in the design of the grid itself. The goal of the smart grid should be to fix that flaw and to provide consumers with safe, reliable electricity on demand. Consumers should be free to use electricity whenever they like. It must be the grid that accommodates the consumer, not the other way around.

This is where distributed energy storage technology can help. By placing energy storage devices out at the tips of the grid, proximate to electricity consumers, distributed energy storage systems really can empower those consumers. Power will be available to consumers anytime they want it. Grid operators will wheel the power to the storage units when it makes the most sense for grid operators to wheel it. The consumer gets the benefit but does not need to be involved in power management.

More importantly, distributed energy storage units provide a useful and well-understood backup power resource for electricity consumers that can diminish or eliminate power outages. Today power interruptions cost American electricity consumers as much as \$150 billion per year. Individual electricity consumers can mitigate such outages only by purchasing individual back-up generators or power systems at significant monetary and, often, environmental cost.

A better approach to selling the smart grid is to have utilities take the expense of back-up power (and the lack thereof) off the backs of electricity consumers and provide it as part of basic electricity service. This may not be as cheap an approach to load leveling as demand response (although accounting for the true cost of demand response is tricky), but it gives consumers something of value that they can appreciate and gives utilities a tangible consumer benefit from the smart grid that they can sell. In turn, the distributed storage units can become the information hubs of the smart grid, rather than the consumer home. Privacy issues can be mitigated, distributed generation more easily accommodated, and a vast infrastructure that can provide DC fast charging opportunities for electric vehicles put in place.

Distributed energy storage systems are not just the killer app for energy storage technology; they can be the killer app that gets the entire smart grid off the ground. Smart grid proponents need better to understand this opportunity and engage more fully with the energy storage industry.



James J. Greenberger
Executive Director



October 21, 2011

NAATBatt Membership Applications for 2011

2012 Membership Applications and Dues Structure

NAATBatt is now accepting applications for membership for the 2012 calendar year. Membership dues for 2012 are \$10,000 for Corporate Members, \$10,000 for OEM Members, \$10,000 for Utility Members, \$5,000 for Associate Members, \$1,000 for Individual Members, and \$500 for Non-Profit/Government Members. Companies purchasing 2012 memberships will be entitled to the benefits of membership during the balance of the 2011 calendar year. Please click on <http://naatbatt.org/membership-inquiry/> and indicate that you are interested in a 2012 membership.

Why Join NAATBatt?

NAATBatt's mission is to grow the market for advanced electrochemical energy storage technology in North America. We concentrate primarily on two markets: electric drive for motor vehicles and distributed, grid-connected electricity storage.

NAATBatt members enjoy a variety of exclusive benefits including: discounted admission to NAATBatt conferences; admission to by invitation-only NAATBatt workshops, such as the Workshop on Distributed Energy Storage that NAATBatt co-sponsored last April in Chicago with the U.S. Department of Energy; admission to Members-Only Site Visits, at which one NAATBatt firm will host all other NAATBatt members for a tour of the host's facility; the opportunity to announce news and new product developments in the Member's News section of the widely read NAATBatt Advanced Battery Weekly; free access to speaker presentations made at NAATBatt programs and workshops; and invitations to attend private meetings with government leaders, such as the NAATBatt-sponsored trip to Washington last year to meet with Chairman Jon Wellinghoff of FERC.

NAATBatt membership also helps support the development of an important industry that could just change the world. NAATBatt provides educational programming on topics of interest to the advanced battery community, a weekly newsletter chronicling developments in the North American advanced battery market, networking opportunities for industry participants and their customers, and thought leadership on issues relating to energy storage markets and technology through the NAATBatt blog.

NAATBatt recently held its 2nd Annual Meeting and Conference in Louisville, Kentucky, which included the 1st Industry-Academic Advanced Battery Summit. The Summit is a new program that NAATBatt has started to encourage the more efficient transfer of advanced battery technology from leading U.S. research universities to industry. NAATBatt identified and brought to Louisville representatives from 15 of the top university advanced battery programs around the country to make flash presentations to industry about what those programs are working on and what technology they have available to license. In all there were 48 high quality presentations made at the Conference and the Summit, copies of which are available to conference attendees and NAATBatt members only.

NAATBatt will soon announce two other initiatives for the benefit of its members that will increase their access to capital and play an important role in growing the market for advanced electrochemical energy storage. Please stand by for some very interesting developments.



NAATBatt is a not-for-profit trade association qualified under Section 501(c)(6) of the Internal Revenue Code that is working for the benefit of the entire industry. Every dollar spent on NAATBatt memberships and programs goes to recouping program costs and to supporting activities intended to benefit the entire advanced battery industry. At a time when it seems that the only people making money on advanced lithium-ion technology are professional conference organizers, the advanced battery industry should take control of its own market and its own future. NAATBatt exists to market for the industry, not to the industry. But NAATBatt needs your support to do it. Please join us.

North American Industry Announcements and Calendar

Presentations from the NAATBatt 2011 Annual Meeting and Conference Now Available: Speaker presentations, speaker bios and attendee lists from the just concluded NAATBatt's 2011 Annual Meeting and Conference are now available on the NAATBatt Web site. Go to www.naatbatt.org and navigate to the 2011 Annual Meeting and Conference link to view them. The links are password protected, and the password is available to NAATBatt members and conference attendees for no charge. Others may purchase access to the presentations for \$250. Please contact Jim Greenberger at jgreenberger@naatbatt.org for your password. Photos from the conference will be posted shortly.

Presentations from the Workshop on Distributed Energy Storage Posted: Presentation materials, handbooks, attendee lists and working group discussion summaries from the April 21, 2011 DOE/NAATBatt Workshop on Issues in Distributed Energy Storage have been posted on the NAATBatt Web site at: www.naatbatt.org. The materials are available for review to all Workshop registrants and to all NAATBatt members. Please contact Jim Greenberger at jgreenberger@naatbatt.org for your password.

Presentations from the NAATBatt 2010 Annual Meeting and Conference are Available: NAATBatt's 2010 Annual Meeting and Conference entitled "The Impact of PEV's on T&D Systems: Challenges and Solutions" was a great success. More than 40 industry experts presented and the conference on topics relating to how the grid was going to accommodate the new load that will be generated by plug-in electric vehicles. Copies of the speaker presentations are available on a secured portion of the conference Web site. Access to the Web site is free to NAATBatt members and conference attendees. Access to the presentations is now available to all other for the price of \$250. Please contact Jim Greenberger at jgreenberger@naatbatt.org for more information about accessing the presentations.

NAATBatt Membership Information. NAATBatt is taking applications for membership from well qualified industry participants and supporters. Membership in NAATBatt is a great way to keep abreast of developments in advanced technology batteries and to support the growth of a market for products that could change the world. Your support for NAATBatt programs, newsletters, and committees is essential to the success of our organization and our industry. To inquire about membership, please complete the following inquiry form: <http://naatbatt.org/membership-inquiry/>. NAATBatt will respond with additional information about membership.

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- ***EV-HEV-PHEV Business Opportunities Seminar:*** Menahem Anderman and Advanced Automotive Batteries will host a one-day seminar on business opportunities in electric vehicles on **October 24, 2011** at The Roosevelt Hotel in New York City. Information and registration for the seminar may be found at: <http://www.advancedautobat.com/seminar/index.html>.
 - ***The Battery Show:*** The Battery Show conference and exposition will be held in Novi, Michigan on **October 25-27, 2011**. The Battery Show is North America's largest free to attend exhibition for advanced batteries. The exhibition showcases the latest battery technologies and solutions, ranging from electric vehicle applications to raw material suppliers. Its two-track business and

technology conference examines battery market development and opportunities, including how technical advances are likely to impact performance, safety and cost. For more information on The Battery Show or to register, visit www.thebatteryshow.com.

- **Lithium Battery Power Conference:** Knowledge Foundation will host the Lithium Battery Power Conference on **November 7-8, 2011** in Las Vegas, Nevada. The conference will provide a general survey of the lithium-ion battery industry. The conference Web site can be accessed at: http://www.knowledgefoundation.com/viewevents.php?event_id=254&act=evt.
- **Battery Safety Conference and Global Battery Tutorial:** Knowledge Foundation will host the Battery Safety Conference followed by Shmuel De-Leon Energy's Global Battery Tutorial on **November 9-10, 2011** in Las Vegas, Nevada. The conference will discuss safety incidents and product recalls regarding lithium-ion batteries. The conference Web site can be accessed at: http://www.knowledgefoundation.com/viewevents.php?event_id=254&act=evt.
- **1st NY-BEST Regional Technology Conference:** The 1st NY-Best Regional Technology Conference, highlighting developments in energy storage technology at leading New York universities, will be held on **November 15-16, 2011** at Woodcliff Hotel & Spa in Rochester, New York. Information about the conference can be found at: <http://www.ny-best.org/civicrm/event/info?id=7&reset=1>
- **1st North American & Asian Lithium-Ion Technology Conference:** The North American & Asian Lithium-Ion Technology Conference will be held on **January 12, 2012** at the University of Nevada Las Vegas in Las Vegas, Nevada. The conference is co-sponsored by UNLV and an affiliate of the Lion Battery Industry Association of South China. More information about the conference can be found at: <http://lbiana.org/industry-events/>
- **International Battery Association – Pacific Power Source Symposium Joint Meeting 2012:** The 2012 meeting of the International Battery Association and Pacific Power Source Symposium will be held on **January 9-13, 2012** at the Hilton Waikoloa Village in Hawaii. Information about the program may be viewed at: <http://www.soest.hawaii.edu/PPSS/index.htm>.
- **IEEE PES Conference on Innovative Smart Grid Technologies:** The IEEE PES Conference on Innovative Smart Grid Technologies will be held on **January 16-20, 2012** at the Washington Marriott Wardman Park hotel in Washington, D.C. The conference will examine a wide range of smart grid technologies, including energy storage. Information about the conference can be found at: <http://www.ieee-isgt.org/>
- **2nd Annual 10X Advanced Battery R&D:** The 10x Advanced Battery R&D conference: Breaking Barriers in Advanced Battery Performance and Value will be held on **January 23-24, 2012** in Santa Clara, California. The conference will examine next generation technologies that may dramatically reduce battery costs and/or increase battery energy density. NAATBatt is a supporting organization of the conference.
- **12 International Advanced Automotive Battery Conference:** The 2012 International Advanced Automotive Battery Conference (AABC) will be held on **February 6-10, 2012** in Orlando, Florida. The program will feature five days of intensive meetings, symposia and tutorials. Information about the program can be found at: <http://www.advancedautobat.com/>.

- ***The 29th International Battery Seminar & Exhibit:*** Powersources.net will present the 29th International Battery Seminar & Exhibit at the Broward County Convention Center in Fort Lauderdale, Florida on **March 12-15, 2012**. The Seminar will discuss the state of the art of worldwide energy storage technology developments for portable products, power and vehicular applications. The Web site for the conference can be found at: <https://powersources.net/florida/frameset.html>.
- ***International Electric Vehicle Symposium:*** The Electric Drive Transportation Association will produce the 26th international Electric Vehicle Symposium and exposition (EVS26) on **May 6-9, 2012** in Los Angeles, California. Information about EVS26 can be found at www.EVS26.org.
- ***IEEE PES Transmission and Distribution Conference and Exposition:*** The IEEE PES Transmission and Distribution Conference will be held in Orlando, Florida on **May 7-10, 2012**. The conference will focus on innovation in power delivery systems, including storage systems. Information about the conference can be viewed at: <http://www.ieeet-d.org/>.
- ***5th Symposium on Energy Storage: Beyond Lithium Ion:*** The 5th Symposium on Energy Storage: Beyond Lithium Ion will be held in Berkeley, California on June 5-7, 2012. The Symposium will focus on next generation battery technologies, such as silicon anode technology, lithium sulfur batteries and lithium air. More information can be found at: <http://bestar.lbl.gov/bli5/program/>.



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