

Testimony Before
United State House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy and Power

By
Christopher Christiansen
Alevo, North Carolina

Chairman Whitfield, Ranking Member Rush, and members of the Committee, thank you for inviting me to testify today on behalf of Alevo, Inc., before the Subcommittee on Energy and Power of the Committee on Energy and Commerce. I appreciate the opportunity to participate in a discussion of “The 21st Century Electricity Challenge: Ensuring a Secure, Reliable, and Modern Electricity System”. You will hear from me today how Alevo believes that energy storage will play a crucial role in ensuring that this challenge is met.

My name is Christopher Christiansen and I am a co-founder of Alevo and serve as the Executive Vice President of Alevo Energy. I am responsible for all daily energy division activities, including production design, business development and sales strategies. I am also overseeing the development of over 200 megawatts of operating storage projects in the next 12 months. I have experience developing business concepts for the energy industry as well as a wide range of other sectors, including software, food and electronics.

Alevo is a leading provider of energy storage systems designed to deliver grid-scale electricity on demand. Our innovative battery technology, which features an inflammable, long life inorganic battery, the Alevo GridBanks, enables new source-agnostic architecture for

electrical grids that reduce waste, greenhouse gases and other emissions, create efficiencies and lower costs for the world's energy producers and their consumers. Our mission is to maximize the value, availability, usability and cleanliness of electricity to better serve mankind and the environment. We were recently the proud recipients of the CLT Joules 2015 Energy Innovation of the Year Award, which recognizes an outstanding company that has made significant impact with a transformative energy technology or service. Alevo is also a member and serves on the Board of the Energy Storage Association, the trade association that represents a wide range of energy storage technologies that serve a variety of functions throughout the electric grid.

Alevo's manufacturing plant is located in a former cigarette factory in Concord, North Carolina. We expect to employ 500 people in 2015 and 2500 in 2016. Alevo is set up for significant growth and our site in North Carolina can at full capacity produce 16 GWh with employees exceeding 5000. Within the next twelve months we will be manufacturing and commissioning more than 200 megawatts of energy storage batteries. Alevo is building a vertically integrated manufacturing and deployment organization, creating a global energy storage business to work with the world's largest energy companies.

The electric grid is the only system of production that has not had a way to store its product efficiently. As electricity is generated, it must be used or it goes back to ground. Energy storage changes that equation, allowing us to store that electric production and then use it when we need it, where we need, and at the best price.

Energy storage technologies, like the battery Alevo is manufacturing, will change the way our electric grid works--to enable greater efficiency of our existing generation fleet, by optimizing heat-rates , to integrate new innovations in generation, to allow for increased resilience and reliability of the system, and to lower the cost of electricity for every consumer.

Additionally, the increased efficiency provided by storage lowers emissions and water usage, two important environmental benefits realized without adding cost to rate payers.

According to market research firm IHS, energy storage growth will “explode” from .34 gigawatts in 2012-2013 to 6 gigawatts by 2017 and over 40 gigawatts by 2022. To put this in perspective, 40 gigawatts is equivalent to 40 new coal or gas fired power plants and provides enough electricity to power more than 32 million homes for 1 hour. This explosion will create jobs in manufacturing, as with Alevo, right here in the U.S., allowing us to put our innovation to use to the benefit of the electric grid and consumers.

As the theme of this hearing suggests, energy storage technologies like Alevo’s GridBank will enable a secure, reliable and modern electric grid. States hit by Superstorm Sandy, like New Jersey and New York, are already building these technologies into their resilience plans to ensure that emergency services are kept functional during catastrophic events. Even during ordinary power blips or outages, energy storage can help a system and its consumers ride through those events seamlessly. Southern California Edison recently issued a series of awards to accommodate local capacity requirements for their electric customers. They were required to consider 50 megawatts of energy storage in the mix; instead, they awarded 260 megawatts of energy storage since it was competitive and provided the flexibility the utility needed for the system. As utilities and system operators consider their needs both now and in the future, more and more energy storage is being deployed, decreasing the perceived risk inherent in new technologies, and reducing the cost of those technologies through increased scale. Alevo is positioned to drive down those costs even further with the manufacturing of hundreds of megawatts of energy storage capacity in the first year alone.

I look forward to addressing any questions the Committee has about Alevo and our innovation or about energy storage technologies more generally. Thank you for the opportunity to present this testimony.