

Renewable power needs smart storage solutions

Ancient Greek philosopher Heraclitus claimed the only thing constant in life is change — a truth we must accept and even celebrate. Another truth we face today is a growing demand for more energy while also minimizing environmental consequences.

Renewable energy are two words often woven into environmentally conscious dialogue. According to Dave Lucero, director of alternative energy storage at EaglePicher Technologies LLC, the Tri-Cities should be thinking about two more words: energy storage.

Lucero recently addressed the Tri-Cities Research District about tackling the persistent challenge of maximizing renewable energy — which is inherently variable due to changing weather pat-

terns — while capturing that energy and making it available for later use.

“The development of effective commercially viable energy storage technologies is critical to anyone who cares about renewable energy,” said Lucero. “As a U.S. citizen, I feel highly passionate about our need as a nation to maintain leadership in developing energy technologies. Energy storage represents an opportunity that has yet to be tapped into and we have a chance to grab hold of it.”

So how can we harness wind and solar power when it comes for later use?

EaglePicher is among those working to answer this question, along with researchers at Pacific Northwest National Laboratory. The partners are cooperating on a \$9 million effort largely funded by

the Advanced Research Projects Agency-Energy, a new government organization created within the U.S. Department of Energy to promote and fund research and development of advanced energy technologies.

“The energy storage market doesn’t currently have a leader, leaving the field wide open with opportunity,” said Lucero.

However, just to develop technologies that work is not enough. They also must be cost-effectively integrated with the existing energy system to truly be viable.

“We’ve partnered with an excellent lab with the facilities and staff to match,” Lucero said. “I’m confident that our work with PNNL will help uncover where and how energy storage technologies can be integrated to help meet our growing energy demand going forward.”

It’s exciting to know such efforts — and dollars — are being invested

in this emerging technology area here in the Tri-Cities. This could potentially represent a viable economic path for our area in the future.

Improving our nation’s ability to leverage renewable resources for energy generation, transmission and distribution is going to continue to be a hot topic. California’s mandate to provide 5 percent of its power from energy storage technologies within the next three years is a highly aggressive target that further emphasizes a huge market opportunity.

These are the kinds of potentials our community should nourish as we seek ways to further grow and diversify our economy. We have the expertise and research facilities to be a major player in this arena.

Right now, Infinia, InnovaTek, PNNL and WSU Tri-Cities are engaged in several efforts to incorpo-

rate energy storage into their research and development activities. Adding a storage component to an ongoing large-scale smart grid demonstration project and developing improved battery technologies designed to capture, store, and distribute renewable energy are just a sampling of the many projects that are helping the Tri-Cities get on the inside track.

As American philosopher Ralph Waldo Emerson put it, “Do not go where the path may lead; go instead where there is no path and leave a trail.” We need to leverage our opportunities to do just that.

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