4-13-2012

An Energy Professionals' Networking Group that's Creating a Buzz

Nevada Institute for Renewable Energy Commercialization (NIREC)

Follow this and additional works at: https://digitalscholarship.unlv.edu/nv_newsflash

Part of the Entrepreneurial and Small Business Operations Commons, Oil, Gas, and Energy Commons, and the Sustainability Commons

Repository Citation
Available at: https://digitalscholarship.unlv.edu/nv_newsflash/2

This Newsletter is brought to you for free and open access by the Publications (USI) at Digital Scholarship@UNLV. It has been accepted for inclusion in Nevada Newsflash by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.
Bleary-eyed but wide awake at 2:00 am, I reached for my phone for a little social media solace. Clicking into a popular networking site, I typed "energy" in the search field. To my surprise, the search returned a list of over 10,000 options.

As professionals, entrepreneurs and affiliates to the energy industry, let me spare you an early morning quest. There is an industry-related group that has quietly built a network of members 20,000-strong with tentacles reaching throughout the U.S. and abroad.

**Young Professionals in Energy** (YPE) is the first and only interdisciplinary networking and volunteer organization for people in the global energy industry—a place where bankers can connect with engineers, accountants with geologists and so on. The name is a bit of a misnomer—the group is open to and welcomes energy industry professionals of all ages. (I like to think of the word “young” as indicating a certain amount of commitment and energy to staying current in one’s career.)

In a little over a week, YPE is hosting its annual Summit in Las Vegas. Starting Monday, April 23, conference participants will explore topics ranging from electric vehicles to trends in the oil industry and hear discussions of innovation and technology adaptation, entrepreneurship, policy, and business growth. A panel will focus on “Your Career in the Energy Industry,” and a NIREC-moderated panel will discuss finding and funding the next great energy idea. Daniel Yergin, author of *The Quest: Energy, Security and the Remaking of the Modern World*, will deliver the keynote.
Founders Stephen Craves and Michael Teplitsky, who both work in private equity firms, envisioned YPE as a way to bring industry professionals together to network and exchange ideas in a comfortable setting. With chapters throughout the U.S. and in London, Hong Kong and Moscow, it’s clear that YPE is filling a niche for the energy industry.

If you haven’t already registered, take a look at the information in the panel to the right—and use the NIREC discount code to save $100. We look forward to seeing you there!

*Jackie Phillips* is a communications manager for NIREC.

---

**The Water-Energy Nexus**

Pat Mulroy’s conversation at the University of Nevada, Las Vegas in March, as usual, did not disappoint. Focusing on her responsibilities as head of the Southern Nevada Water Authority (SNWA) she helped establish 30 years ago, she made clear that, “Water and energy exist in an energy-intensive vicious circle.”

As Mulroy explained, most power plants of any kind need massive amounts of water for cooling. Photovoltaic (PV), which requires no water except for cleaning, is the major exception. Meanwhile, treating water and pumping it uphill—as is done from Lake Mead up to Las Vegas—requires an enormous amount of energy. Desalination of ocean water remains expensive precisely because it requires so much energy.

The Las Vegas Valley is nearly 90 percent dependent on the Colorado River—itself chronically over-allocated and facing lower long-term flows under most 21st century climate change scenarios. With this looming water deficit, Mulroy’s SNWA aims to cut net water consumption and “is ardent in opposing heavy water use energy projects.”

“I’m not a big fan of solar thermal,” Mulroy said. “It’s horrible on water use.”

I respectfully disagree, and want to explain why. Solar thermal, or concentrating solar power (CSP) uses more water than PV, but less than coal or natural gas plants.

For example, the aging Reid-Gardner Station, a coal-fired electric

---

**What’s the buzz?**

Join us at the Opening Night party where we’ll make a special announcement!

**Who is a young professional in energy?**

You are!

There’s no age limit or prejudice. All are welcome to enjoy this unique networking opportunity. C-level executives from many of the world’s major energy players are active members of YPE and attended last year’s YPE Summit.

---

**GRANTS AND OPPORTUNITIES**

**CleanTech Open Business Competition**

CleanTech Open
Amount: $20,000; $10,000 - Region
Up to $250,000 Grand Prize
Important dates:
- April 13, 2012 (TODAY!) - Western Region Mentor Briefing (Reno)
- April 17, 2012 - Western Region Business Briefing (Las Vegas)
- April 26, 2012 - Western Region Business Briefing (Las Vegas)
- April 26, 2012 - Western Region Mentor Briefing (Las Vegas)
- May 8, 2012 - Final Entry Date

**Energy Innovation Hub - Batteries and Energy Storage**

U.S. Department of Energy; Chicago Service Center
Awards: 1
Funding: $120,000,000
Letter of Intent: May 1, 2012
Deadline: May 31, 2012

**2012 EERE Postdoctoral Research Award: Accepting Geothermal Applications**

U.S Department of Energy - EERE
Deadline: May 1, 2012

---

**MORE OPPORTUNITIES >>**

**EVENTS**

Moving Nevada’s Clean Energy Economy Forward
generation plant north of Las Vegas, needs about 4000 gallons of water per minute to generate at peak power of 557 megawatts, according to its engineer Dave Sharp. This comes out to, very roughly, about 5000 acre-feet per year.

By comparison, Nevada Solar One CSP south of Las Vegas generates about 75 MW of peak power using 300 acre-feet per year for wet-cooling, according to their engineers. But newer, larger solar towers like those under construction at Crescent Dunes and near Primm aim to use up to 90 percent less water per unit of energy than wet-cooling, through newer dry-cooling technology. If successful, these new CSP plants will use just 10- to 15 percent of the water that conventional fuel and nuclear plants use per unit of energy generated.

OTHER WATER TRADEOFFS. While Nevada, the driest state, has made major improvements reducing urban water consumption, much more can be done with low-flow fixtures and desert landscaping. Even so, fully 75 percent of Nevada’s water gets used for agriculture. But water-saving drip irrigation does not work well for some crops, and retiring more farmland in an age of food scarcity is equally impractical, explained Mulroy. "It's a fragile balance."

Finally, water scarcity increases uncertainty for businesses contemplating a move to Nevada, Mulroy explained. But long-term conservation innovations like low-flow fixtures and return flow credits—water credits attained when water used by Las Vegas is treated and returned to the Colorado River—can improve the long-term business climate by saving water.

Water, energy and business development, then, are all closely related. "We can't live [solely] on gaming anymore," Mulroy concluded. "The question is not whether we grow—but how we grow."

JIM ROSSI is currently a graduate student studying renewable energy at UNLV, and has written for the Los Angeles Times, Bike and many other publications.


More about Water:
- Colorado River Water Users Association
- Western Water Assessment, University of Colorado, Boulder
- Southern Nevada Water Authority
- Return Flow Credits
When first meeting Tyson Falk, NIREC’s policy analyst, his passion for Nevada and for clean energy is immediately evident. A Nevada native, Falk has lived in the northern and eastern parts of the state where he noticed a lack of diversity in career options. “Everyone I knew worked in the mines or casinos,” said Falk. “But I saw all the open space land and potential for solar, geothermal and wind.”

He knew he wanted to make a difference. While studying criminal justice and pre-law at the University of Nevada, Reno, Falk worked in the legal community and began realizing he didn’t want to be “duct taped to the desk.” He says, “I didn’t want to be stuck with interpreting the law as it was written and accept the status quo.” He wanted the flexibility to advocate for what he believes in and have the ability to influence and change the law into something that would “work better.”

Attending a course in energy politics and policy with Adjunct Professor John Scire unveiled a new focus for Falk. He merged his burgeoning interest in renewable energy with a focus on public policy, graduating with a master’s degree in public administration accented by admission into the Phi Kappa Phi Honor Society. “Tyson was one of those very exceptional students,” said Scire. “He had motivation and he realized he could help create policies that could actually get things done. He is very intelligent and he intensely believes in protecting the environment.”

Falk represented the Clean Energy Rail Center on clean energy issues as a registered lobbyist during the 2011 Nevada legislative session. At a hearing where SB75 was presented to the Nevada Legislature, Falk met the Clean Energy Foundation’s Walt Borland, now president and CEO of NIREC, who was outlining the need for Nevada to have a more expansive private equity and venture network in the state. In Borland, he recognized a dedication to Nevada similar to his own.

"Tyson understands the critical role of clean energy in rebuilding Nevada’s economy,” says NIREC President and CEO Walt Borland. “He has an extensive knowledge of Nevada and brings a bright mind and approachable demeanor to the task of educating others about the value of supporting innovation and commercialization of clean energy.”

Falk says his role at NIREC is clear. “With renewable energy, there is inherently government interaction and policy matters every day….and policy—environmental, economic, regulatory—is embedded in the process,” says Falk. “There is a plethora of policy tools to encourage renewable energy and without them it would be hard to move things forward.”

"A lot of people don’t understand why we aren’t [creating clean energy more quickly]. To make clean energy developments worthwhile for investors is part of what is needed, but it is not attractive to investors when there are policy hurdles, a lack of an adequate transmission grid, or no one to sell it to.” That is the good and bad, he says, and is the reason people need to be engaged to give suggestions and solutions. He sees his role as helping to shape public policy by educating people and working to make it easier for businesses to produce clean energy and related
GreenPower K-12 Renewable Energy Education Program Seeks a Fulltime Administrator

The Desert Research Institute is seeking a fulltime administrator for its GreenPower program. The program promotes and supports education for K-12 students in renewable energy and in incorporating conscious living practices in their daily lives. The position can be located on the Reno or Las Vegas Campus and requires experience in event planning, project management and/or program management. See the job description on the DRI website.