In Business

Renewable energy boom boosts job opportunities

By Nicole Lucht Friday, October 2, 2009

Increasingly known as the New Energy Economy, the wave of renewable-energy construction is creating a demand for workers trained in emerging electrical systems.

Just as farmhands were retrained as factory workers during the Great Depression, electrical workers today are learning how to wire a solar system and how to maintain it, whether it's on a massive utility scale in the desert Southwest or on the sprawling rooftops of suburbia.

"There is big potential for solar installers," said Randy Hynes, president and founder of Nevada Solar-Energy Alliance. "We're going to need 600 (solar installers) by the first of the year" for upcoming projects.

The government has promised to invest in renewable-energy technology, development and implementation. Even more federal assistance appears in the climate bill that Congress is considering.

Twelve gigawatts of utility-scale solar plants are in some stage of development, mostly in the Southwest, Rhone Resch, CEO of Solar Energy Industries Association, said at a news conference. That's enough to power 2 million homes for a year, he said. Most solar developments are in early phases and haven't yet broken ground.

"There's never been a more exciting time for solar energy," he said. "It's a complete game changer."

The alliance trains workers in solar construction, maintenance and how to audit residential energy use, he said.

This fall it will be training about 400 workers, and over the summer 20 workers were on a waiting list for the program, which costs about \$200.

Another group, the Electrical Joint Apprenticeship Training Committee of Southern Nevada, has trained about 500 union electricians since early 2006, training director Madison Burnett said.

Workers — some of whom take a day off work — will line up hours before registration opens in hopes of getting one of 24 seats in the class, Burnett said. Because the course is union-sponsored, it costs the trainees just \$50 for the book.

"Most are out of work and are hoping this training will give them a leg up on any jobs that come up," Burnett said. "This is the highest-demanded class (because of) the anticipated work that is coming up. People want to take a part in it."

The training takes 60 hours and combines theory and practical training in photovoltaic solar systems.

Some workers are training to become energy auditors also, anticipating that demand for solar installers will slow.

Energy auditing is a growing field, Hynes said, with auditors collecting as much as \$450 for three hours spent analyzing a 2,000-square-foot home's energy use, he said. Right now, three certified auditors work in the state, he said.

"There's not much of a demand right now," he said. But he said energy auditing will serve as a fallback for electricians when installation jobs decline.

By 2011 buyers of existing homes in Nevada will be required to have a home energy audit.

"We think that should be the first step," Hynes said. "An auditor can find enough (waste) to knock off 30 percent from an energy bill."

Demand for energy audits will increase as energy cost rise, said Sheila Conway, managing partner of Urban Environmental Research, an environmental consulting firm. Audits of commercial businesses, depending on the facility's size, could cost upward of \$1,000, she said.

"It's not just making the environment cleaner, it makes it much more economical," said Conway, whose company offers energy audits. "That's just good business."

During an energy audit, which can take several hours, an auditor will go through the home or business noting wasteful energy practices and the efficient systems.

"It's more than changing light bulbs or installing solar," Conway said. "What we want to do is identify what are the primary efficiencies and cost benefits."