



**PSE&G installs the Petra Solar SunWave system on a utility pole in New Jersey. The two companies have a contract to install up to 200,000 systems on utility and street light poles in about 300 New Jersey communities. The systems will produce 40 megawatts of power.**

want to be involved in the standards-making process so there are no surprises. That's how we plan to shape our part of the grid in the future."

The standards are currently being put together by the various subcommittees of the National Institute of Standards and Technology, of which Paine is a member. Though no standards have yet been formally agreed upon, they are working their way toward approval, Paine says.

The key to having a sound smart grid in the future will be building a strong foundation, especially on the utility side of the equation, says Gary Rackliffe, vice president of smart grids for ABB. His company is gearing up for the smart-grid market by creating systems for utility companies to manage their hard assets, including transformers and substations.

"There has to be a way to take all of the information utilities are getting from meters and the like and translate it into useable information," Rackliffe says. "We see a shift from a focus on meters to distribution grid management, and that's the space where we plan on being a part."

Jeremy Eaton, vice president of Honeywell Energy Solutions, says his company is focused on putting together a suite of products that will help utilities be more load responsive. "Nothing on the demand side has to change for our technology to be effective," Eaton says. "We're the head-in communications software that allows various systems to talk to the buildings and get real-time information."

Honeywell is embedding communications devices into

its thermostats and other utility-grade equipment. "We want our utility customers to have precise control over the loads they're carrying," Eaton says.

Some companies are even producing monitors for the transmitters themselves. Vivek Joshi, president of LumaSense Technologies Inc., a Santa Clara, Calif.-based manufacturer of sensors for transformers and other transmission-side technology, says his company will have an advantage over others in the realm of dissolved gas sensors. Those sensors will allow utilities to monitor the performance of their transmitters. "The market for these sensors on existing transmitters is growing exponentially both domestically and overseas," Joshi says. "Our attention is on asset optimization for people around the world. That's where our company sees the largest opportunities for growth."

As the focus for the smart grid continues shifting, many companies are turning their attention to building the utility infrastructure that will be needed to make the smart grid a reality. "We're in a transition," says Honeywell's Eaton. "Just building the consumer infrastructure doesn't solve the problem, and if we're not careful, there will be a backlash against the smart grid if the suppliers can't do what consumers expect them to do. We can't allow that to happen because there's too much at stake.

"If we do it correctly, we can be the leaders of this worldwide revolution," he adds. "But we need to start thinking more seriously about it now if that's going to happen." iw