

## Navigant's Vrins sees regulation as biggest challenge

Jan Vrins of Navigant Consulting corrected us in an interview recently when we referred to electric utility “ratepayers,” noting they are now called “customers,” and the industry in the last 10 years has clearly shifted its focus to serving them with advanced services and technologies. He is global energy practice leader for the firm and was speaking to us for the Smart Grid Today audio program.

We described the predicament utilities face in adopting smart grid and Vrins disagreed with our version of the state of the industry. “I actually want to push back, if that’s OK with you. We hear all the time that utilities are not able to innovate and have been doing things the same way in the last hundred years,” Vrins said.

“Utilities have in the last 10 years, from our perspective, significantly invested in innovation and new technologies. Their focus has been primarily on generation, transmission and distribution – the assets that they own and operate – a little bit into the engagement with their customers,” such as online and mobile app bill payment and customer service, he added.

“And now I think we see utilities getting more engaged in the DER space around distributed generation, storage, microgrids, electric vehicles – which is the only DER, by the way, that gives them more load and additional revenue. So I think utilities are very well aware of what’s happening at the edge of the grid around distributed energy resources, new products and services that their clients are demanding, starting with the large commercial and industrial customers and I think they are having teams working on these.

“Will there be other providers of those products and services, companies that are more focused on technology or smaller companies that are startups that can innovate even faster? Yes,” Vrins said. “The good thing of the energy cloud is there is space for all of that. There is space for a utility that is the orchestrator that will have to invest in a smarter, more intelligent, distributed, cleaner and mobile grid.

“And then there is also space for the the Googles and the Amazons and the Honeywells and the security companies and even some oil and gas companies are getting into this game now as well of providing beyond basic electricity, new energy products and services to customers,” he added.

“That’s the good thing of the energy cloud and these platforms, all that can coexist. We actually believe there is a \$1.3 trillion new market that is being created between now and 2030 – and this is a yearly number – so by 2030, we believe there is a \$1.3 trillion new market behind the meter around energy as a service and energy cloud platforms globally.

“That is a big market. That’s why you see the Teslas and the Solar Cities and the Ikeas and the oil and gas companies and the Googles and the Amazons all interested in that market... and that could actually generate more customer value as well as shareholder value for many of the companies that I just named including the incumbent utilities,” Vrins said.

He went on to describe how the regulatory frameworks need to catch up with the changes developing fast in the industry. “Our current regulatory framework, whether its at the federal level or at the state level was designed for this central (generation) model and the energy cloud works entirely different.

“Our big point is that we really have to step back and say, ‘listen, the current regulatory framework was developed for this central station generation/transmission/distribution world. That world doesn’t exist because we have distributed energy resources in every part of the country.’” Some places have more than others, such as California, for example, he added.

“But we have DER everywhere and we have to step back and develop a new regulatory framework that actually supports prosumers, that supports two-way power flows, that supports things like distributed generation and storage and really revise our regulatory frameworks including the role of the participants, who does what, who can connect what, who is responsible for what, and what are the revenue models and business models tied to that.

“This will be, I think, the factor that slows down the transformation because, as you well know, regulation is complicated, changing regulation is even more complicated.”

But serious attempts are underway around the globe, he added. And the shareholders that he presents to about the energy cloud, “they get it,” Vrins said.

The entire interview is available [on our website](#) for streaming and on most leading podcast websites and mobile apps.