Congress and the Cybersecurity of "Things"

It seems like only yesterday that I was fighting to get Congress to understand what DR is, and then it became what smart grid is, and then - more recently - what DER is. So I was pleased the other day when I was multi-tasking and intermittently watching a Hearing held by the House Energy & Commerce Committee. There were a lot of members of Congress using the term Distributed Energy Resources, and a lot of them were talking about the modern electricity grid.

The topic of the hearing was not DER, however, or even grid modernization in general. The hearing was called to focus on cybersecurity.

Cybersecurity in electricity first came on the national policy scene as a critical issue back in 2009. One quick focal point was the fact that new equipment and devices were about to be put into the electricity system via the smart grid investment grants (SGIG) that came out of the American

Recovery and Reinvestment Act (ARRA). Not that the projects funded by grants were the first examples of grid modernization. A lot of that was already happening. But suddenly, the federal government was faced with being responsible for a sudden surge of devices being installed at the same time it was becoming fully aware that the electricity system was critical infrastructure, and vulnerable infrastructure when it came to cybersecurity.

Cybersecurity concerns did not stop the grants from going forward. No one really knew how to suddenly inject cyber policy at that level of the grid. So there were provisions added to the grant application and contracting language that led to somewhat of a self-certification by parties to make best efforts to address cybersecurity in how they implemented a funded project.

As you know, since 2009 cybersecurity as a critical issue has ramped up in significance. You all are aware of some of the headlines of specific instances like what happened in Ukraine.

But cyber policy to date has primarily been at a very high level - that of trying to sort out responsibility and communications among federal agencies. As cyber bills started to be introduced and move on the hill, members of my DR/Grid advocacy coalition would worry that they were somehow in the crosshairs. But all those bills were solely focused on those high level issues I just mentioned, and were not surgical or technical in any way.

Well.....

At that House hearing I listened in on, I heard a very different discussion about cyber and electricity.

The hearing was called to look into cybersecurity in the bulk power system. Witnesses included NERC, the ISO-RTO Council, and other experts. There was a lot of discussion about cyber at that level. But it didn't stay at that level. Discussion went way below that.

A lot of the questions from the Members of Congress started to focus on what grid modernization meant for cybersecurity. They asked what an increasing amount of DER on the grid meant. They asked what the many IoT devices being connected to the grid meant.

A member asked if cybersecurity should be "baked" into devices when they are manufactured. Another asked if home devices that somehow relate to electricity and the grid are a new and important point of cyber vulnerability. A specific question was whether or not smart thermostats should be subject to special cybersecurity standards.

The witnesses, who were primarily from the wholesale, bulk part of the grid, talked about how it may be necessary to get customers to care more about cybersecurity so that they begin to eliminate themselves as a factor. The Members agreed with this, but kept talking about putting more of a burden on manufacturers. One member talked of "certification" of electricity-related equipment for cybersecurity.

So are we headed toward a big "drill-down" of the cyber focus in our sector to where it is something that will affect utilities and technology companies at a very granular level? I can't say that based on simply what I heard at this hearing. It is too early for that. But as you can guess, cybersecurity is a bi-partisan issue (i.e. who is going to be against it). And having so many members engaged at the hearing was a bit surprising. It may be that cybersecurity policy is about to be discussed in entirely new ways.

Dan

PS - if you would like to see an interesting video article on cybersecurity in the energy sector that NBC recently carried - go here.