

Making the Grade at the Transmission Business School

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You may have never heard of Transmission Business School. Started by the University of Illinois at Urbana-Champaign and run annually by Illinois Seminars in a building next to the Willis Tower in Chicago—which makes their building look miniscule by comparison—Transmission Business School offers classroom-style learning that the power industry doesn't much see these days.

If you wanted to know all the details of risk and electricity markets, the inner workings of economics of PJM or personal profiles of ATC or ITC, you'd be raising your hand quite a lot in this week of classroom learning.

Martin Lin with The Lin Group dissected electricity markets and risk management one Wednesday morning of the school. Lin began by discussing how the system organizations have evolved from independent, isolated power providers to interconnected providers with economic transfers, although the markets those providers work in can vary greatly as the regulatory bodies vary greatly by location.

Lin reviewed market details and how credit has become more important in this market.

“People didn't care much about credit pre-Enron,” he added. “But now they do.”

Linn added that while price risk is most discussed, there are other areas of risk that participants should keep an eye on—including credit (and liquidity, operational, legal/regulatory and political).

Now to measure the risk you're dealing with, Lin talked VAR (and not in the volt-ampere reactive sense, but in the value-at-risk sense). This sense of VAR is the maximum loss a portfolio

will experience over time, but this concept relies on assumptions of “normal” market conditions when no one can promise those markets will be normal because they aren’t always and extreme events are still possible. For example, one risk not measured by VAR is one this industry sees a lot—namely transmission congestion, although there are transmission congestion products available.

In the end, Lin suggests a few simple ways to manage your risk. First, identify those risks and what you want your exposure to be. Then develop a risk policy, looking at available tools and the limitations that VAR possesses. Finally, measure that risk and enforce your risk policy.

Lin also called for a cultural change and an acceptance of third parties in these markets. “There is a role for speculators,” he said. “Getting the buyer and the seller, who are both naturally exposed, to hedge at the same time is nearly impossible. That’s where the speculator can help.”

The discussion of transmission, markets and economics continued with a talk from the chief economist of PJM, Paul Sotkiewicz who noted that the ISO is “trying to maintain reliability through markets.”

That may mean fewer large-scale transmission builds in the future, Sotkiewicz added.

“I’m not sure I’ll see another major transmission project in my career,” he told the class, pointing out that this in, in fact, aligned with load growth trends we’ve already seen, including that lesser growth being a major contributor to the cancellation of some major “backbone” transmission projects, such as MAPP and PATH.

And while he admits that the large volume of generation retirement is leading to needed upgrades, he sees them as more local rather than the backbone transmission once considered the norm.

In fact, Sotkiewicz believes that a lot of new transmission in the system will come from new entrants rather than the old guard—those investors with skin in the game in the areas of new generation who see the \$15 or \$20 million needed to connect that generation to the system as “chicken feed.”

Sotkiewicz and other speakers from Transmission Business School—along with University of Illinois faculty members—came together at noon for a luncheon panel to dive more deeply into some of the issues discussed in previous sessions.

The first question discussed the possibility of a transmission build-out in North America. Sotkiewicz jumped right now with his idea that backbone transmission is dying but that he does see some smaller stuff on the local scale.

“We are building 500kV stuff, but it’s not long stuff. It’s not backbone. It’s smaller stuff. A lot of people assume there will be large backbone projects. That I just don’t see,” he started.

Harry Singh, vice president with Goldman Sachs, agreed with Sotkiewicz on both the low backbone need but higher regional need.

“It’s not correct to say we won’t have transmission, but we’ll see more regional builds,” he said.

“There’s going to be quite a bit of transmission built,” Mike Rowe, president of American Transmission Company, added to the discussion, taking a new tack. “We’re seeing a lot of build out, but, no, it’s not backbone. So, it won’t be as big, and permitting may delay things, too.”

“Eventually we’ll have to access wind and solar from various parts of the country to answer the load need,” said George Gross, professor of engineering, at the University of Illinois at Urbana-Champaign and director of the Transmission Business School. “In the West, they’re sitting on all that wind, and we’ll need an answer to get all of that to the East Coast.”

“There are still years of historical underinvestment we haven’t made up for,” added Nisha Chopra, director of M&A, at ITC Holdings. “We’ll see those investments going forward.”

Sotkiewicz noted that we’re really talking footprints here—where it’s going to be put short-term or long-term. If transmission is built on a merchant basis on the same way gas pipelines are currently built, he added, that undercuts the need for that backbone transmission.

“It’s a fallacy that you have to bring the wind all the way to the East Coast,” he argued. “I’m going to argue with George here. You don’t have to build ties all the way to New Jersey. That’s not cost effective.”

“I don’t completely disagree,” Gross replied.

Transmission Business School is an annual event helmed by IllinoiSeminars. For more information, visit <http://www.illinoiseminars.com/tbs/index.html>