

The Rising Risks Faced by Utilities

NEW APPROACHES TO OFFSET CHALLENGES

BY GARY M. STERN

BRENDA BOULTWOOD, THE CHIEF risk officer at Constellation Energy, had watched closely the Federal Reserve as it bailed out Bear Stearns by approving a \$30 billion credit line to JPMorgan Chase. Prior to its collapse, Boultdwood and the credit team at Constellation Energy, based in Baltimore, Md., had gotten reliable information that Bear Stearns was facing liquidity issues. "We started restricting trading with Bear six weeks ago in terms of the size of the deals. Two weeks ago based on this information we stopped all trades," she said.

"We're looking more broadly at who could be next. Despite assurances from the head of the Federal Reserve Board that financial firms won't fail, Constellation must conduct due diligence and monitor its exposure to each financial service trader," said Boultdwood.

Reducing Constellation Energy's trading with Bear Stearns illustrates the many new ways that a chief risk officer must monitor and control risk. Volatility at major commodity traders such as Bear Stearns or Credit Suisse First Boston can trigger losses for energy companies.

At many utilities, the risk environment has intensified in the last year. Rising coal prices, volatile gas prices, more stringent environmental pressures and trading partners with liquidity issues generate a host of problems for utility chief risk officers (CROs) and CEOs.

What keeps Stephen T. Haynes, the chief risk officer at American Electric Power, up at night is the fear that one of AEP's traders will turn into the next Jerome Kerviel, the trader at Societe Generale whose losses exceeded \$7 billion. To minimize risk, AEP has reduced its number of energy traders from 75 to about 25, making it easier to track them. "We're doing more assessments of individual traders and their activities in a timely way that they're not aware of. We want to have a full grasp of what they're doing," Haynes said.

Developing more effective financial models is another way to measure risk, said Haynes, who is based in Columbus, Ohio. Haynes said that one priority at AEP is developing measures and controls in the market concerning the credit risk of AEP's trading operations. Because AEP owns the largest coal-fired plant in the United States at 1,500 megawatts, Haynes recognizes that a huge swing in volatility could alter its pricing and affect markets nationwide.

Ironically, the upheaval in the financial markets has strengthened energy markets by injecting new funds into them. "We're seeing more people, such as those in hedge funds, putting more money into the commodity markets and pulling back from their structured financial products," Haynes said.

Because of the massive losses that some financial services companies have suffered, utility traders are stepping up hedging to minimize any potential losses. "If they're not hedged, they could be overexposed to volatile natural gas and oil price changes," said Dilip Daswani, a vice president of corporate development at Triple Point Technology, which is headquartered in Westport, Conn. and develops software for commodities trading. Historically, smaller utilities didn't employ

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financial instruments such as swaps, derivatives and options to hedge exposure. "Now they don't have a choice," he noted.

Daswani said that CROs have learned that a small exposure can turn out to be a real problem. If natural gas prices spike and the traders aren't hedged, losses can quickly snowball, damaging liquidity. Hence CROs are looking at risk more holistically and taking market, credit and operational risks into consideration.

In fact, risk managers at utilities are going beyond examining commodity price risks and are scrutinizing their firms' working capital, noted Sid Jacobson, a managing consultant at PA Consulting Group's global energy practice, who is based in Houston. Risk managers are taking a closer look at receivables and debt service for regulated utilities to get a stronger handle on each firm's own liquidity.

Much of this focus on liquidity is stemming from stepped-up scrutiny by boards of directors. "Boards

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are more involved in understanding what's under the hood. They not only want to know the what's but the how's," Jacobson noted.

But trading and liquidity risks are only two of many faced by most utilities and energy companies. Utilities are concerned about increasing construction costs for building new power plants and whether the regulators will authorize their coal-fired plants or demand more carbon-emission restrictions.

Haynes suggested that if investment and commercial banks keep tightening credit, utilities would pay more for their construction loans and face a more difficult time obtaining them. After not building plants for several years, AEP, like other major utilities, is exploring building new power plants to meet growing consumer and commercial electricity needs.

"Now that we're back in the construction mode, are we doing everything to watch out for risks?" asked

Haynes. Since construction and insurance costs are increasing, he investigates what costs can fall into a gap and cause any unforeseen losses.

Developing new power plants also leads to regulatory risks. Since AEP is located in 11 states, it must interact with 11 state public utility commissions. To show how complicated regulatory issues are, AEP is building two new integrated-gasification

combined-cycle plants, one in Ohio and another in West Virginia at a cost of \$2.23 billion each. Each plant will take four years to construct after regulatory approval is granted. However, the Ohio Supreme Court ruled that AEP could not recover its front-end engineering and design costs from the public while the West Virginia public utility commission said it could.

The competition for coal on a global basis is spiking prices worldwide and causing an assortment of risk issues, noted Constellation's Boulton. Since Constellation has hedged much of its coal trading and has long-term contracts, it has weathered the recent price increases. "But if this phenomenon continues around coal, there will be an impact on electricity prices," she said.

Stephen Reynolds, CEO of Bellevue, Wash.-based Puget Energy, said that most risks have remained steady in 2008 except for market price volatility for gas and oil. "We're also seeing coal prices at levels we haven't seen for some time. It reinforces the need to be

less dependent on anything with a volatile commodity price and continue our risk-management activities associated with hedging," said Reynolds, whose staff of risk specialists has developed a series of action plans and scenarios that allow them to anticipate and prepare for each risk contingency.

Of all the risks that concern Reynolds, the area he is most concerned about is the one he has the least control of: the weather. "Major weather upheavals such as ice storms and windstorms disrupt our service in the short and long terms," he said. In fact, windstorms of 60 to 80 miles per hour on December 14–15, 2006 in the Seattle area disrupted electricity for 700,000 of its one million customers. It took Puget Energy 10 days to restore service for all of its customers.

Financial tools can counter even weather-related events. Peter Went, a senior researcher at the Global Association of Risk Professionals, based in Jersey City, N.J., noted that risk officers need to understand how hedging can reduce the effect of weather changes. Weather derivatives can reduce market risks. If a major snowstorm hits the Northeast and exacerbates power needs, utilities can hedge electricity prices but still must ensure access to enough power to meet customers' needs.

In the West, Reynolds noted, environmental issues are increasingly producing risk. "Green concerns, both literally and figuratively, are an important part of the DNA in our customers, politicians and ourselves," he said. Becoming energy efficient is a constant goal, which has led Puget Energy to step up the use of renewables. In fact, Puget now derives 5 percent of its energy from wind power and expects that number to increase to 10 percent by 2013.

Risks don't happen in a vacuum but occur in a political context. "The most important uncertainty involves politics. Political risks affect changes in deregulation, the environment; political decisions can even affect subsidies for ethanol or wind. And utilities have to be concerned about the next president, Congress, state legislatures, and local issues," explained Peter Hartley, a professor of economics at Rice University, who is associated with the university's Energy Forum.

"The risk analysis at most utilities is maturing. I'm seeing risk become part of the DNA of most utilities," said Jacobson. And most utilities are spending more time on risk scenarios to anticipate any potential crisis. What happens if environmental regulations change? What happens if load migrates? What happens if natural gas supplies lessen or prices spike? For most utilities in 2008, those scenarios are keeping chief risk officers quite busy.

NewsFlash

NUCLEAR STUDY SUPPORT

The U.S. Department of Energy is providing \$18.3 million to study nuclear fuel recycling, according to the *Associated Press*.

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