Cynthia Kase reveals technical hedging tips for not-so-technical traders

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▼ince 1991, Cynthia Kase has formed an integral component of the core of energy risk management expertise available to oil, gas and power producers, consumers and marketers. The president of Kase and Co. Inc., Kase's motto is "the bot-



Cynthia Kase,

markets with a highly controlled methodology to hedging, supply logistics and trading: She blends her background experience as a former engineer, a cash, futures and

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OTC derivatives market trader and a commodity risk management professional into her current work as an energy market technician. With a higher than 94 percent accuracy in her energy forecasts, Kase was recently recognized as the best in her field by the Market Technician's Association. Today the company (www.kaseco.com) continues to provide risk management planning and program design, strategic defensive hedging services and software, trading and short-term hedging services and software, and training,

EL&P: Ms. Kase, what are some of the unique challenges of trading and hedging electricity versus other market commodities?

Kase: First of all, power is highly illiquid as far as the futures contracts are concerned, so it makes it difficult to trade effectively because you don't have many charts to work with. And it's just not a lack of liquidity; it's a lack of transparency. If you don't have an active market, you can't plot meaningful futures charts. And if you can't plot meaningful charts, analysis of any kind, either statistical or technical. becomes difficult. Secondly, there's very little liquidity in the futures market six months to a year out. After the debacle in the summer of 1998, a lot of folks don't want to sell forward summer power. You can certainly hedge power a month or so out, but it's very difficult to hedge, for example, next summer because so few of sellers feel the need to be hedged in the summer months. It's tough to be a hedger if no one wants to take the other side of the deal. To put it differently, the price of hedging the power doesn't justify doing so.

EL&P: You've been noted as saying, "managing risk is the key to trading" and that exits are an important, but often overlooked, element in trading. Please explain.

Kase: Many traders trade based on either a "gut feel" or fundamentals, and most often a combination of the two. The difficulty with that approach is that whether they're right or wrong, they're only developing an entry strategy. Very rarely do gut-feel traders have a strategy for exiting their position.

In the end, we can't make any more money than the market allows us to make. In other words, the maximum amount of money we can make is either from a low to high or a high to a low. That's reality. We rarely get in at the low and get out at the high; we usually get in after a move is somewhat established. So the limited profit potential is not optimized if you have no strategy to get out. You can give a large portion of your profit back by not having an appropriate exit strategy. Plus, gut-feel traders have no way to tell, in any objective way, that they are in error.

My answer of when to exit is statistical. As a technical trader, I look for a statistically significant reversal. There's always a certain amount of "noise" in the market. And in an up market, you're still going to have some moves down. So you can think of the down days in an up market as "noise." When you have a move that is larger than the noise in the market, that's a statistically significant move, a move that is larger, usually one standard deviation or more, over the average.

EL&P: Can you give us some general rules that govern the market and hedging? There are some general rules that we know about the market, statistically. For instance, trending runs tend to last three to four months before a dip or stall takes place; in trending markets the entire for-ward curve trends; cycles are predictable; winter prices tend to be higher than summer prices; winter prices tend to peak in the summer, drop in the winter; summer prices peak and see their lows in the summer; and trends tend to take place in multiple cycles.

Kase: As for hedging, some general rules that apply are: hedge when the opportunity presents itself, not based on a particular fiscal or calendar year. Opportunities take place when strips are at extremes. Never hedge the first nearby contract, and often postpone the second and third; and hedge for at least six months, preferably a year or more, as it usually takes three to four months for a market to revert. Finally, fix forward in small increments, rather than one lump, over a three-to four-month timeframe, and be prepared to remove hedges under certain pre-defined conditions.

As for options, you should buy options for four to seven months out; buy options when prices are not at an extreme, but moving in an adverse direction (at or just past the mean price); and buy ontions in large tranches when triggered, in one or two passes.

EL&P: The hedging philosophy of Kase and Co. is one based on a more strategic (statistical), rather than purely speculative, fundamentalists or tactical, methodology. Why?

Kase: My entire philosophy on hedging is based on the idea that people don't enjoy losing money on hedging. Back in the 1980s, the market inherited risk management and derivatives philosophies in general from the banking community, where it was used for currencies and interest rates hedges. Well, if you're a company manufacturing widgets and selling them to

Germany and you lock in the Deustche Mark exchange rate, you're locking in a profit for your company that does not have a lot of upside mark-to-market risk. The risk of losing or making money on the hedge would be a small, if not negligi-

But in commodities, if I'm an electric utility and have a lot of gas-fired generation capacity, there's a big difference when I buy gas at \$4 and it falls to \$2. The percent of my profit that's impacted by gas prices is much higher than the percent of the profit of the widget manufacturer who is affected by the fluctuations in the mark. In many cases, the hedging of fuel is not locking in a margin; they're not hedging a spark spread as much as they're hedging just one side of the deal. But a utility that bought gas at a high price and then lost a \$1 per MMBTU on a mark-to-market basis may have to explain millions of dollars in losses to stockholders.

So when I first started thinking about hedging, the biggest thing that occurred to me was that if energy companies were going to be hedging, they had to be sensitive to the price at which they hedged. They couldn't be characterized the same as the widget manufacturer or interest rate hedger. The challenge is how to be price sensitive without being speculative. And if

you're not going to speculate, how are you going to come up with a methodology that is logical and supportive of a price-sensitive strategy? My answer is by using a statistical approach.

EL&P: What are some of the basic differences between statistical and technical hedging and when to use them?

Kase: In the strictest sense of the term, technical hedging means hedging using technical analysis. like pattern recognition and empirical mathematical methodologies to take advantage of transitory trends. That means shortterm hedging or one-sided technical trading, that is, hedging against my company's natural position. But distributions like bell or log-normal curves do

not work for short-term pricing, which don't form statistically understandable distributions. Short-term prices don't revert to a mean. We can only use statistical methods for forward curves of generally six months and longer maturity. Only then can we can talk about standard deviations above and below the mean, probabilities of occurrence and statistical distributions. (See figure.)

EL&P: You've spent almost two decades advising energy companies about energy risk management strategies. I'm sure you've witnessed some costly fallout from bad hedging. What are some of the most common hedging mistakes made? What are some ways to avoid these pitfalls?

Kase: The top mistake I see electric utilities make is selling options and thinking i is risk management. For example, if you're an electric utility, you might sell a cal option thinking it's going to give you cash flow. Let's say power's selling for \$30 MW? and you sell a call option at \$100. There's a couple mistakes right there. First of all you're not going to get a lot of money for an out-of-the-money call option. On the other hand, if you do get called it's because prices have risen beyond \$100, and there's nothing to tell you they're not going to rise to \$1,000 or \$3,000. There's something going on then, a heat wave or a disruption in fuel or whatever. And if you're a provider of last resort, it's just when prices are high that you're going to be in the least favorable position to have that swing capacity to satisfy the demand engendered by your call option being exercised. So, selling options without the 100-percent assurance that you have the supply to deliver the option is a big mistake.

The other problem is trying to secondguess regulators. Now under FAS #133, in order to qualify for hedge accounting, you have to avoid certain strategies that are more cost effective. For example, a call

Target \$4.57 predicted by waves \$4.57 = 3x Targe One of Kaza's examples of wave formation patterns where target prices his be predicted through a wave formation methol THE PERSON NAMED IN

> when applied properly as a hedge, qualifies for hedge accounting. But a synthetic call, which works just like a call but involves buying a put and buying forward - and is often much cheaper - will not qualify under hedge accounting under FAS #133. An electric utility that buys gas might have to pay, say, 30 cents for synthetic option might have to pay 45 cents for a vanilla option. Driven by FAS 133, companies may have to pay 50 percent more for an option or decide not hedge at all because they feel the option is too expensive.

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EL&P: Since most traders have access to the similar data, how can a power trader avoid "jumping" at the same market signals as other traders?

Kase: First of all, if the market's going up, you want to be long; if the market's going down you want to be short. So it doesn't particularly matter what other people are doing if you're overall assessment is correct. It's kind of like if the ship is sinking and everybody's

trying to get into the lifeboat at the same time, do you not want to get into the lifeboat too? You know, traders are like snowflakes — there are no two alike. The objectives between an intra-day, daily and a long-term position trader are going to be different. It goes back to the 80/20 rule, where 20 percent of the people make sound decisions and make the money, and 80 percent are too lazy or too emotional to do the proper work.

EL&P: What kind of impact does electronic trading and the move towards a 24-hour market have on commodity markets?

Kase: If you have trades going on during periods of illiquidity—you have to think that in the middle of the night, it's not going to be that liquid—you could get aberant moves by people doing small volumes. So I think you could get aberrations because of that. But my guess is that it could have a reverse effect to what the exchanges wanted. I mean I think the exchanges have gone to these long trading hours to compete with the market makers. But I think all it will do is give the market makers even more reason to be 24-hour companies. They might not achieve what they want; they might just end

up as a clearinghouse for the market makers to do their deals.

EL&P: In closing, could you leave us with any "market secrets" or tips to successful trading?

Kase: Know why you're trading. Know what your objectives are. Have a plan, both to get in and get out, and know what to do if you make money or lose money. When it comes right down to it, ultimately what gives one trader a competitive edge over another trader, everything else being equal, is hard work and discipline.

The biggest thing in risk management is to know what your objectives are and what you're trying to achieve. In a lot of cases, part of the problem with risk management is that people don't understand what they're defining as risk. First consider qualitatively what are your risks – are you short, long, do you even have to hedge at all? Secondly, take it seriously. Electric utilities especially tend to cut corners in areas where they shouldn't. They try to have a do-it-yourself risk management program instead of getting expert advice. The other mistake that they can make is to be overly software-oriented and not spend enough time on the development and understanding of a risk management philosophy and objectives, categorization of risk and training of people.