

Concord buys electricity

⇒ **How do we decide major purchases?**

- * Do you think Concord should be speculating in derivatives, buying monthly futures contracts for natural gas?
- * Should Concord use ‘financial engineers’ to supply its electricity?
- * Do we want purchases the size of a school to be hidden from cognizant citizen boards?

If you want to spoil the punch line(s) ... click through to a Summary [here](#) (or use the panel to the left, in the electronic version) – CONCLUSIONS and then WHAT TO DO, pg 12 and then pg 13.

If the news sets your scene, recent stories shine a bright light – [one group](#) of stories reflects on the first question above, [another group](#) on the second and third questions.

⇒ If you prefer to build the story, with the news items along the way, *read on the next page* – is it a page-turner?

Concord's supply of electricity

The new contract with Morgan Stanley

How does Concord best make such decisions?

To replace the Town's contract for supply of electricity, expiring next year in 2009, Concord – so far – has opted to speculate in one of the most volatile markets in the world. Further, that speculation put \$35 million of ratepayer money at risk, the price of a new school. Though other funding for such amounts is vetted exhaustively across the Town, those who committed the town to this speculation did not even check with the Board of Selectmen nor the FinCom. In fact the decision was, for six months, actively concealed from the CMLP Board until the contract was fait accompli.

As one consequence of the old contract coming to an end, the price the town pays for electricity will double. That, albeit something we might wish otherwise, is nonetheless effectively unavoidable.

But as an additional consequence – brought on by the new contract – the Town is also speculating in the futures market for natural gas. That means the price paid by Concord's ratepayers could balloon further. Speculation is unpredictable and could bring as much as an *additional* doubling or tripling – on top of what already will unavoidably be a doubling. The cost of electricity supply for Concord could be a multiple of as much as four times to six times the present cost.

At the same time the new contract was let, there was also on offer a fixed-price contract (in fact there were six such offers). That would have locked the price at the unavoidable doubled level only. The option was spurned.

What are the facts of this situation so far?

There have been seven monthly CMLP Board meetings since the contract was signed August 7 2007. The process to let that contract began six months before, in February 2007, as documented in a chronology. Though today's existing contract covers 'all requirements,' the new contract will supply just 55 percent of Concord's electricity for about three years, that is for 39 months over the period October 2009 through December 2012.

The contract is with Morgan Stanley, a Wall Street financial firm. For the 39 months, Morgan Stanley guarantees a 'heat rate.' The heat rate is a ratio that specifies the amount of electricity Morgan Stanley will deliver for the input of a specified amount of natural gas. The Town of Concord buys the necessary natural gas in monthly futures contracts, through Morgan Stanley.

A main rationale to justify the speculation is to save money, compared for instance with prices last August, including the benchmark implicit in the fixed-price offers that were passed up at the time. So far, this has played out as follows:

A provision of the Morgan Stanley contract allows the town to buy futures contracts at any time. After discussing for four months, that is, by November 2007, the CMLP Board voted to recommend using this provision. Specifically, the Board recommended locking in half the contract. When completed, that lock-in of half the original amount was more expensive by – rather than saved – about \$150,000 compared with August prices. Rather than saving money, the result so far has cost about one percent of the portion locked in.

Does it make sense for Concord to buy gas in futures markets?

Any understanding starts with a review of the natural gas market.



source: <http://www.tfc-charts.w2d.com/chart/NG/M>

This nine-year chart of monthly natural gas prices illustrates the volatility. In one of the most extreme episodes here, beginning around May 2005, the price of gas rose

low-to-high by a factor of more than two and a half times in about half a year, that is, more than 250 percent. Annualized, that is the range of 500 percent. The price immediately turned around to fall, in less than a year, by a factor of four. That is more than 400 percent annually.

This is only one instance. These wild swings are evident several times earlier too.

That is extreme short-term volatility. Equally severe, the longer-term price *trend* is up by several full multiples. Use your own eye to judge. For example, the beginning of 2002 the price of natural gas was around \$2; two years later by Q1 2004 the price had reached \$6 – a tripling, a 300 percent increase in two years. Or if we see a trend on through 2006, a price of \$8 and a quadrupling, a 400 percent increase in five years.^{1,2}

Such a five-year period, beginning from inception of the contract, is the span over which Concord is concerned with gas prices in the Morgan Stanley proposition.

The Light Plant's portfolio of risk

Last fall's presentation to the FinCom, on the new Morgan Stanley contract, argued that the Light Plant takes risks.

Let's be clear. The Light Plant has taken at least one quite significant risk – and it was warranted. That was the risk of coming into existence, in the first place, a hundred years ago. The risk of a new technology, then it was electricity generation and distribution, is high. So can be the reward, if successful. Concord has signal benefit from that risk of old, successfully navigated. The very high-quality management in the Light Plant's present incarnation brings those fruits forward, to all of us a hundred years later.

That presentation to the FinCom pointed, however, back across the hundred years, citing various other instances; then it proceeded to treat the new Morgan Stanley contract as one in a list of similar risks.

The whole point of risk assessment in finance is to differentiate levels or degrees of risk, then to pair that stratification with prospective rewards. That is basic, and some may feel the reminder talks down to them – but that is where we are.

Rather than treat all risk homogenously, purpose is served *only* if different degrees of risk are sorted high to low. Only then can we think about parceling potential risks and returns into a portfolio of different baskets, some where the risk-return trade is higher, and others with prospect for more certainty even if the return is lower.

¹ To sharpen perspective on gas prices longer-term – over about a quarter century, 22 years – and also to compare across world markets, see the [chart on page 15](#).

² Jack LaMothe gave us to appreciate the price trending over these time frames of interest.

To give some sense of the risks of trading in gas futures: One of the more spectacular recent bankruptcies was Amaranth. Amaranth was a hedge fund, and its professionals focused on trading gas futures. Their bankruptcy in the gas futures market lost billions of dollars.

But we have already seen the risk in gas futures is most extreme – that is obvious, just looking at unpredictable, hundreds-of-percent price gyrations.

So we have to ask, what might be the return, for the Light Plant to take such a risk? Could a return perhaps be commensurate? Most observers, it seems, see the best we might hope is a 15 to 20 percent decrease in the cost of our electricity supply.

For a possible return on the order of a 15 to 20 percent price improvement, the risk is a price increase of several hundreds of percent – 100 percent, 200 percent, ... Completely unpredictably. This is a risk/return tradeoff? – that is a falloff, a plunge down the side of a cliff, absurdly lopsided.

That – by itself – makes *not* doing this a no-brainer.

Are gas futures prices really unpredictable?

Some seasonal trends in the price of natural gas, across a given year, have been discerned. Even these are not reliably reproduced every year.

But for longer-term price prospects, we have the case, in Concord, of views from quite knowledgeable individuals, people who currently spend their lives engaged with these markets. One set of views says that prices may decline medium and longer term. Another set of views – with sound data on industry fundamentals, we note just below – are clear that the likely trend for gas prices is up.

When those steeped in the facts see opposite directions, there is not predictability. Period.

Though, there is reason for concern – in the rest of the analysis – with enough fundamentals pointing to a price uptrend. (For a visual take, see the longer term quarter-century [chart](#) pg 15, already referenced in footnote 1. Also, for the North American market, the [NY Times](#) has just published (Feb 2008) a piece that reports how fundamentals are gathering for a new, sustained price rise, repeating the past. [Another pair](#) of articles, same time frame, underline other opinions that come to a similar conclusion.)

Can 'risk management' save Concord's bacon?

The Light Plant has proposed that it can mitigate the risks in gas futures speculation with 'risk management.' This is a scheme of purchases that price-average across time.

In no way can such schemes protect against unpredictable price increases that go up and stay up. We are already clear that we cannot predict. We are equally clear that the price of natural gas has indeed gone up and stayed up – by 300 percent in two and 400 percent in five years. Only a fool would ignore the possibility of that repeating.

Such ‘risk management’ schemes, certainly the one proposed, have prospect only where there is much less volatility and when it is predictable for price to fall more or less as much as it rises. For an example of the latter, interest rate markets may rise and fall by tens of a percent. That is a very far cry from markets that may ricochet by hundreds of a percent over the same time frame, such as is natural gas.

More generally, failed ‘risk management’ schemes have been the downfall of the titans of Wall Street. With the unfolding of the credit crisis, the news is littered with guilty admissions of failure in ‘risk management.’ See pg 14 for a selection of quotes from the recent press.

It is a fundamental error to put on the narrow blinders of a ‘risk management’ scheme and fail to take on board the realities of the market where it is to apply. Concord can ill afford to repeat errors of the titans – with those errors now exposed by which to learn, that would also be the greatest folly. To repeat: *Price rises cannot be ‘managed.’*

Does portfolio theory somehow sanction such price averaging, nonetheless?

Portfolio theory, put generally anyway, depends upon a mix of high and low risk/reward bundles. Then, across time, losses in some of the more aggressive investments may be buoyed by more predictable returns in the more conservative. With price averaging there is no mix – the time stream is all one commodity, in this case natural gas, with its high risk.

A computer model of the Morgan Stanley contract

To gauge ‘sensitivities’ for Concord’s ratepayers – ‘what savings with a gas price decline, what cost with increases?’ – an Excel model of the contract tests outcomes at some opposite extremes: when price declines by 10 percent and when price rises by 300 percent and 400 percent, the increases we have seen historically.

The results speak for themselves. The upside is a \$33 million contract, compared against the \$35 million baseline available as a fixed price in August 2007. On the downside, in addition to the unavoidable \$30+ million, as much as another \$100 million is removed from Concord’s economy.

Though it is possible to hook the cells of the spreadsheet into live feeds from prices in the gas market, that is not necessary to judge orders-of-magnitude effect – the purpose here. Instead, the price for the October 2009 monthly futures contract serves as index for price. (This index was also the choice, at one point, of a Light Plant analysis.)

This index price in the model is \$8.292, the Oct 2009 futures contract price as of October 18, 2007. Also, notice that the model addresses the whole contract amount, before half was locked in.

If you want to carp about assumptions in the model – for instance, if you want a more relaxed time period for the price rise – the formulas are all there for the tweaking.

Where there are comments in cells, do hover to see the message.

If you are receiving this electronically, the spreadsheet may accompany it; otherwise, the spreadsheet is posted at davidallen.org. In either case, to view the model ‘Enable macros.’ (Macros are necessary to tie one sheet to another – the second sheet is for subsidiary calculations. To get to the second sheet, remove the ‘Split view.’ If you are on Windows, the macros may also require that you relax security controls when you have them set tight.) And be sure to scroll down enough, to see the ‘TOT contract’ line.

In practical terms ...

You may well ask, ‘But how does this play out in practical terms?’

We have seen there is gathering opinion in the national press that gas prices may begin to repeat an earlier uptrend. Quite at the same time, we see a history of repeated spikes – as in the most recent case, an annualized 500 percent jump topping out at almost \$16.³

Imagine if something like that recurs – another hundreds-of-percent jump, but starting from the vicinity of today’s ~\$8.50 – and the CMLP board follows its ‘risk management’ price-averaging scheme:⁴

With some price uptrending, the triggers in the scheme that are based on price (intended to buy at lower prices) won’t buy any gas. Then the time-based triggers finally kick in and must be obeyed; futures contracts must be bought regardless of the price. If one of these wildly volatile spikes recurs, the numbers from the computer model show a worst-case outcome. Half of the contract is now locked in, so ~\$17.5 million remains at risk. From the model, halving its worst case shows as much as an additional \$50 million could be paid for our electricity. Instead of another \$17.5 million, the town pays \$67.5 million.

Since its November meeting, when it voted to lock in half, the CMLP board has in three successive monthly meetings declined to lock in the remaining half.

- Over just the couple weeks between the January and the February meetings, the price of the Oct 2009 contract rose about 3.65 percent. If indicative for the whole

³ Dec 2005, from a low of \$4.52 a year and a quarter prior Sep 2004.

⁴ Instead of space devoted to detailing the scheme, the next paragraph summarizes the scheme’s material effects.

contract still at risk, that amounts to another \$600 thousand cost – from delaying just two weeks.

- If the price rises to the \$9 to \$10 range foreseen in the news articles of the last weeks, the increased cost is on the order of \$2.8 million.

All the neighbors would pay. While the Light Plant board continues to explore, into an eighth month, its course of action.

On the other hand, the price could fall, particularly in the short term and with the chaotic volatility. That probability is non-zero.

Which illustrates that the price is simply not predictable. Which gets to the real question, where we started:

- Does Concord want to take these gambles?

Specious arguments:

Several arguments were advanced in the discussion.

1. “The market has changed, so we have to use Wall Street firms.”

The facts clearly say otherwise. The price history in this market confirms a clear continuation, [over twenty years](#) and ongoing; both the volatility and the longer-term uptrend continue – there is not a change. More to the immediate focus, in the course of letting the present contract there were four fixed-price bids from established utilities. The management of CMLP can on their own steam, any time they choose, close up the remaining supply that Concord needs. Apparently ‘all requirements’ contracts are no longer on offer, but that is not a deterrent.⁵

A Bloomberg piece spotlights the real change: entrance into the market by ‘financial engineers.’ Their motives and behavior in the market are addressed point blank immediately in the next section.

2. “Other towns are doing it.”

As with lemmings, the question is how much comfort to take that others are getting clobbered too. The super jumbo Wall Street lemmings who followed each other over the sub-prime cliff hopefully will be a spectacle too riveting not to take for the warning it is.

⁵ Concord now also has separately to buy ‘capacity’ – essentially, that is a regulatory payment toward building future generating capacity, according to CMLP. That too is not a deterrent.

3. “This is not speculation.”

This is *not* hedging. Hedging is the protection of a position already in hand. This is the taking of the position, which would beg for a hedge. So we see that this is the counterpart to hedging – speculation. This is speculation of a rank sort.

4. “The contract does not incur transactions costs.”

To implement the plan, a consultant will look at gas prices every day on Concord’s behalf. Thirty-nine months in the contract amount to about 1,200 days. Consultants are not eleemosynary, certainly not for effort across 1,200 days minus two-sevenths for weekends. There are most certainly transaction costs in the Morgan Stanley contract.

5. “Nuclear power will drive down the price of gas.”

The prospects for serious development of nuclear in the five-year time frame of this contract are likely not worth discussing.

6. “Futures markets predict spot.”

When futures markets are sometimes pointing down, that has been imagined to foretell a future fall in the corresponding spot market. A detailed study has disabused us of the notion that futures reliably predict spot. See: Ahmed El Hachemi Mazighi, (2003), The efficiency of natural gas futures markets, OPEC Review 27 (2), 143–158. doi:10.1111/1468-0076.t01-1-00057 <http://www.blackwell-synergy.com/doi/abs/10.1111/1468-0076.t01-1-00057>

(excerpted from the abstract: “Using monthly data ... both the NYMEX and the IPE fail, with regard to the hypothesis that the forward price is an optimal predictor of the spot price.”)

Morgan Stanley as supplier of electricity?

Morgan Stanley is – obviously – a financial company, not an operating utility with experience in generating electricity. According to Morgan Stanley’s promotional material it now owns three generating plants, but it outsources operating management of them. Of the three individuals whose bios were circulated as Morgan Stanley employees responsive to Concord, one had perhaps ten years in some unspecified operating position, but the rest of her career has been on Wall Street. The other two, including the senior person, have had no operating experience in electricity generation.

By comparison, four fixed-price bidders, whose offers were passed up in the course of this contract, are established utilities.

Centrally, Morgan Stanley is trading for its own account with this contract. It is a financial trader whose own interests drive its trades. That is not an idle assertion:

Morgan Stanley kept the stable part of the proposition with Concord, the heat rate. The heat rate reflects the operating efficiency of the generating plant, and it is a very well known factor and varies only gradually across time. Morgan Stanley kept this stable part for itself. It left the Town of Concord with the wildly volatile part, speculative purchases in a chaotic market with extreme price swings.

This is the exact opposite that a trustworthy fiduciary would recommend. It is the exact opposite of the match that is essential between investor profile and risk/return in a sound investment plan. The small New England town, with a super-conservative AAA bond rating and financial decision climate to match, was left with what is a most wildly speculative half of the deal. The ultra-seasoned Wall Street trader took the sleepy, predictable, stable part. Which is then easy to game and make easy money, though being Concord's conduit to futures contracts also can be remunerative.

Morgan Stanley behaved exactly the opposite of a trustworthy financial partner. Shame on them. And shame on us for going with it.

The great irony is the basis on which Morgan Stanley was chosen, in the first place.

When the contract was let, Morgan Stanley was deemed not to be the low-cost bidder (an operating electric utility was calculated, at that time, to have the low cost-bid). A basis had to be found to choose Morgan Stanley. That basis, advanced by an advisor? That Morgan Stanley was less risky because the contract was guaranteed by the parent organization.⁶

To be simple, Morgan Stanley has since that time – a very few months – gone down in flames with the rest of its big Wall Street brethren. Less risk, Morgan Stanley was less risk? Morgan Stanley's capital went massively underwater. More than *two and a half times* its capital was in [shaky subprime assets](#). Ultimately to survive the disaster of those writedowns, the company was forced to fire-sale almost 10 percent of itself to China's sovereign wealth fund, the China Investment Corporation. The severe terms make clear the onus: annual interest of 9 percent on bonds that will be convertible into stock in 2010.

⁶ Some would deny the facts of letting this contract. Documentation, rather than assertions, is what any sound steps must rest on. Click [here](#) for a memo from the CMLP Superintendent dated in September 2007, well after the contract has been settled in August. Therein he explains that a mistake has belatedly been discovered in the calculations made at the time of the contracting (as a result Morgan Stanley is no longer second-lowest bidder, but *ex post* is deemed the low bidder). He also confirms selection of Morgan Stanley at the time of contracting as "*not the low bidder [but ...] because of the guarantee.*" Click [here](#) for spreadsheet documents (in pdf format, see particularly pg 4 to which this doc opens) distributed at the August CMLP board meeting, when the Board learned the contract had just been let. The numbers confirm the perceived bid ranking at the time. Re some of our other concerns, this also shows four utilities making fixed-price bids not materially different from (some even lower than!) the 'indexed' bids.

We justified not choosing the low-cost bidder on the basis of lower risk, and the party chosen is shortly scrambling to survive? What were we thinking?

‘Financial engineers’?

Amazingly, in promotional materials sent along at the time, Morgan Stanley allowed itself to be compared favorably to Enron. The Enron fiasco laid bare, of course, the folly of ‘financial engineering’ for electricity supply.

Here is the more fundamental lesson. We might have thought first, before we committed our electricity supply to ‘financial geniuses.’

Sadly, in the press there recently have emerged accounts that reveal the character of these ‘financial engineers’ – pointedly, with regard to how they treat municipal clients. So far, the occasions are school finance and municipal cash management.

A brief quote, the lead from [Bloomberg](#) investigative reporting (by Martin Z. Braun and William Selway, February 1 2008), tells the first story better than could any attempt at a summary:

In September 2003, the superintendent of the Erie City School District in Pennsylvania watched helplessly as his buildings began to crumble.

The 81-year-old Roosevelt Middle School was on the verge of being condemned. The district was running out of money to buy new textbooks. And the school board had determined that the 100,000-resident community 125 miles north of Pittsburgh couldn’t afford a tax increase. Then JPMorgan Chase & Co., the second-largest bank in the U.S., made Barker an offer that seemed too good to be true.

David DiCarlo, an Erie-based JPMorgan Chase banker, told Barker and the school board on Sept. 4, 2003, that all they had to do was sign papers he said would benefit them if interest rates increased in the future, and the bank would give the district \$750,000, a transcript of the board meeting shows.

“You have severe building needs; you have serious academic needs,” Barker, 58, says. “It’s very hard to ignore the fact that the bank says it will give you cash.” So Barker and the board members agreed to the deal.

What New York-based JPMorgan Chase didn’t tell them, the transcript shows, was that the bank would get more in fees than the school district would get in cash: \$1 million. The complex deal, which placed taxpayer money at risk, was linked to four variables involving interest rates. Three years later, as interest rate benchmarks went the wrong way for the school district, the Erie board paid \$2.9 million to JPMorgan to get out of the deal, which officials now say they didn’t understand.

Desperate for \$750,000, a school district instead *pays \$2.9 million* – monies we can be sure come dear indeed in their circumstances – to get out of a contract they ‘didn’t understand.’ A feature (including, in the later cases documented by Bloomberg)? Advisors – seemingly independent, and therefore suitable to advise the municipalities, but – whom in fact the financial engineers pay handsome shares of the spoils.

The article goes on for nine dense pages – across a number of parallel incriminating cases – with complexities in the financial arrangements beside which Concord’s ‘indexed electricity contract’ looks like child’s play. In the compilation of chapter and verse, Morgan Stanley is named as perpetrator alongside JPMorgan (who were also bidders for our contract).

At the same time, that is, about now in February (2008), the story comes home to Massachusetts. The [Boston Globe](#) reports, across three articles and an editorial, that Merrill Lynch is recompensing \$14 million to the city of Springfield and has fired two employees, in part after pressure from the Commonwealth’s Attorney General. Again, a brief quote (reporting by Beth Healy, January 28, 2008) encapsulates:

... in November 2006, when Springfield financial officials found themselves with a multimillion-dollar surplus of cash for the first time in years, it seemed as though their troubles were behind them. [...] Not for long. Just 10 months after placing some \$50 million with Merrill Lynch & Co., those same officials would be scrambling to explain how they’d lost nearly \$13 million on investments so risky that state law bars cities and towns from owning them

...

To be sure, Springfield officials should never have allowed this investment to take place. But their correspondence with Merrill shows that they were confused about what they had agreed to.

...

... others who weighed in on hiring Merrill Lynch relied on the firm’s assurances that the investment met the legal standard for safety and prudence.

Press accounts regarding electricity supply are yet to appear. In the cases reported so far, we see the character of these ‘financial engineers,’ at least for these several municipal clients:

Their behavior is predatory.

Then, finally:

Conclusions

The core conclusion becomes manifest: Concord should not be speculating in one of the most volatile markets in the world. Period. Which would be like running off to Vegas with \$35 million of ratepayers' money, maybe coming back only after an additional \$100 million has been siphoned out of Concord's economy. The travails of the 'financial engineers,' now laid bare in the fullness of time, only serve as an object lesson for us, that we can choose a better path.

After the contracting was done, the calculations for low-cost bid were revisited (as documented in footnote 6 above). New numbers moved Morgan Stanley from second-lowest to low-cost bidder. Since active concealment of the contract over six months requires some investigation, one facet becomes the *ex post* change that gave the contractor low-cost status.

What should Concord do?

First:

And foremost. Concord processes need to respect the work of its citizens who agree to serve on volunteer boards. Never again should a board find – after it has discussed a major and strategic issue for two years and then the topic was on the formal agenda for the last six months – that the decision has been made behind its back over those last six months.

The implications make it unavoidable that this matter be looked into. A group of the most respected citizens – nor the usual suspects – can restore some confidence, if they do a thorough job.

Second:

The mess created by putting Concord into massive futures speculation can be cauterized, finally. Fortunately, the contract allows locking in the other half. If one believes there is seasonality to price, February is even supposed to be favorable. (But *tempus fugit* – as we have seen, gas prices have already risen, in the couple weeks between board meetings that again declined to finish lock-in.)

Third:

And most importantly.

This episode has a sunny side too, happily. Concord repeatedly finds itself facing quite large investment decisions where a pivotal question is, ‘when to step into the time stream of opportunities?’ Such is this question. So are schools, for instance. And other major transactions.

Now we have a springboard to tackle the question frontally and with the remarkable expertise by which Concord is so blessed. In fact, the matter is in two parts. One regards picking points in the time stream. The other regards how Concord institutions organize to vet such major decisions that have the broadest impact, including a look beyond the box of current town charter provisions.

A small group, with a breadth of expertise in such matters, could be a real service to Concord by offering some of their best work.

Here is looking to a productive denouement,

David Allen
Heaths Bridge Road

February 19, 2008

IN THE NEWS — *Financial engineering* and *Risk management*

Financial Times

September 27 2007

[According to Robert Rubin, chairman of the executive committee of Citigroup,] *financial engineering*, ... had the "potential for increasing systemic risk[.]"

New York Times

October 16 2007

Citigroup acknowledged yesterday that its *risk management models* did not function properly[.] Charles O. Prince III, [CITI's] embattled chairman and chief executive [*now dismissed*] ... acknowledged that the bank's risk management models *failed* to avoid huge trading losses.

The bank suffered heavy blows to its fixed-income business, causing it to write off \$3.55 billion from deteriorating securities prices, leveraged loans and bad trading bets. It also set aside an additional \$2.24 billion to cover future losses

Financial Times

Oct 25 2007

Merrill in \$8bn writedown

... Standard & Poor's said the ... losses were "startling" and the write downs "staggering". ... [T]he size of the losses and the change in valuations "heighten our concerns regarding the company's *risk management* and business strategy".

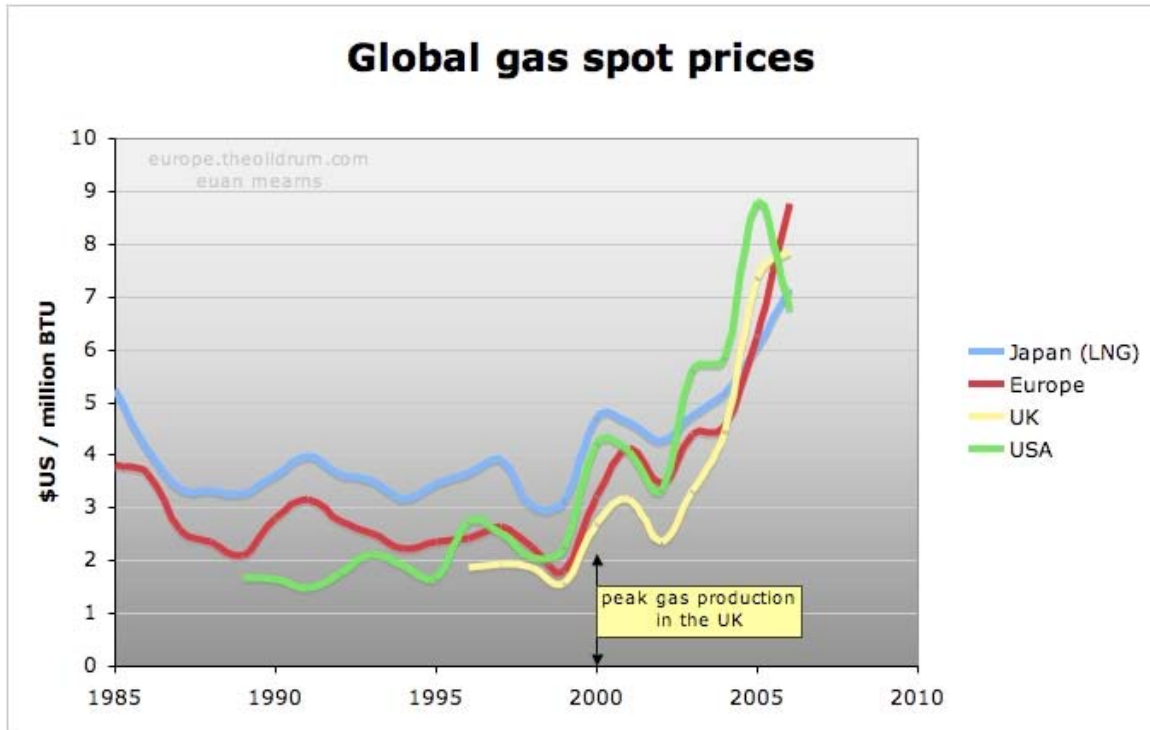
[Another analyst] said the "horrendous" outcome ... raised "serious credibility issues".

"We got it wrong by being *overexposed* ...," said [the CEO]. "We ...I, are *accountable* for these mistakes ..."

... an admission by [the CEO] that *errors were made by the ... risk management team* ...

SUPPORTING MATERIALS

Global spot prices – 22 years



source: [BP Statistical Review of World Energy 2007](#)

via: [The Oil Drum: Europe](#)

To present a 20+ year history, BP represents price for an entire year with a single number. This smoothes and hides volatility, peaks (such as ~\$16 in 2005) and lows, within the year. But the perspective gained reveals trending across the longer term.

(To print this page with its chart, particularly from Acrobat Pro on Mac, you may have to 'Print as Image' – in the Print dialog, click and go to 'Advanced ...')

Links to new stories

* *On the gathering opinion about gas price fundamentals*

–1– NY TIMES, FEB 5 2008

- News site:

[Utilities Turn From Coal to Gas Raising Risk of Price Increase](#)

- To download:

This [Feb 5 NY Times piece](#) as pdf

–2– BLOOMBERG, FEB 11 2008

[Cheap Gas Seen Returning 20% as Oil Meets Slowdown](#)

–3– MONEY AND MARKETS, FEB 13 2008

[Natural Gas Looks Undervalued – Ways to Play It](#)

* *Financial engineers – character and behavior*

–1– BLOOMBERG (investigative reporting), FEB 1 2008

- News site:

[Hidden Swap Fees by JPMorgan and Morgan Stanley Hit School Boards](#)

- To download:

This [Feb 1 Bloomberg piece](#) as pdf

–2– BOSTON GLOBE, re Merrill Lynch in Springfield MA, JAN/FEB 2008

[Springfield left its fate to Merrill](#) – Jan 28 2008

[Merrill to repay Springfield for losses](#) – Feb 1 2008

[Merrill brokers fired after CDO sales](#) – Feb 2 2008

[Springfield cash that got away](#) (Editorial) – Feb 3 2008

To download this document and the Excel model

This document – in its most recent form – is available at:

[http://davidallen.org/papers/Concord and the Morgan Stanley contract-looking forward.pdf](http://davidallen.org/papers/Concord%20and%20the%20Morgan%20Stanley%20contract-looking%20forward.pdf)

To check the *date and time* of the latest version:

<http://davidallen.org/papers/paperdir.html#LightPlantContract>

The *Excel model* of the contract is available at: [http://davidallen.org/papers/CMLP-Morgan Stanley contract-model.xls](http://davidallen.org/papers/CMLP-Morgan%20Stanley%20contract-model.xls)

Three methods

NB: *Documentation of the facts*

This document aims for its purpose with three methods:

- To assemble a reliable recitation of the facts, a narrative accessible even to those who (inevitably) do not have time for more than a matter-of-fact presentation,
- The logic of analysis, and
- Judgments the author draws.

The logic and judgments must be scrutinized ongoing. The recitation of facts can be useful only if reliable. Documentation is essential to confirm validity of that recitation. Copies of the various documents are available; please email [me](#) or phone if you need some item.