

Over-the-Counter Energy Derivatives

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Who is APM?

- Owned by & provides Risk Management and Trading services to 17 non-profit consumer-owned electric power suppliers across 21 states
- These utilities consume large volumes of natural gas to run generators:
 - 43,000 MWs of Load
 - 32,000 MWs of Electric Generation
 - 2.6 Bcf/Day Peak Natural Gas Consumption
- 50% of utilities operating costs are fuel

Who is APM?

- APM does not Speculate, only Hedges price risk we already have
- Exposed to volatility in price of natural gas
 - Different Price Each Day or
 - Temporary Price Spikes That Triple Cost of Fuel
- Our use of derivatives
 - predominantly for hedging natural gas price volatility
 - to help keep power costs stable and affordable for consumers

Proposed Derivative Legislation

- APM does not object to wider OTC derivative reform, increased regulation and oversight, additional reporting, position limits, or authority to the CFTC to prevent market manipulation
- APM is asking for a narrow carve out exemption for end user hedging as with H.R. 4173
- One-size fit-all legislation ends up hurting the end-use-consumer, in our consumer-owned business

Understanding Derivative Use For Energy Products

- Consumers have all experienced price volatility at the gas pump – Different price each day or spike to \$4
- Budget for gasoline consumption is tight for the next year
 - Concerned about price volatility
 - Want to reduce price uncertainty & the impact on your budget
 - Future prices are published & updated every day
 - Like today's gasoline prices & want to lock in prices for the next 12 months

Understanding Derivative Use For Energy Products

- No physical product exists
 - Gas stations don't offer this
- However...you can get very similar cash results via a derived product – a “DERIVATIVE”
- You agree to pay a counterparty a fixed price for the next 12 months of estimated consumption
- In exchange, a company pays you the floating price over time

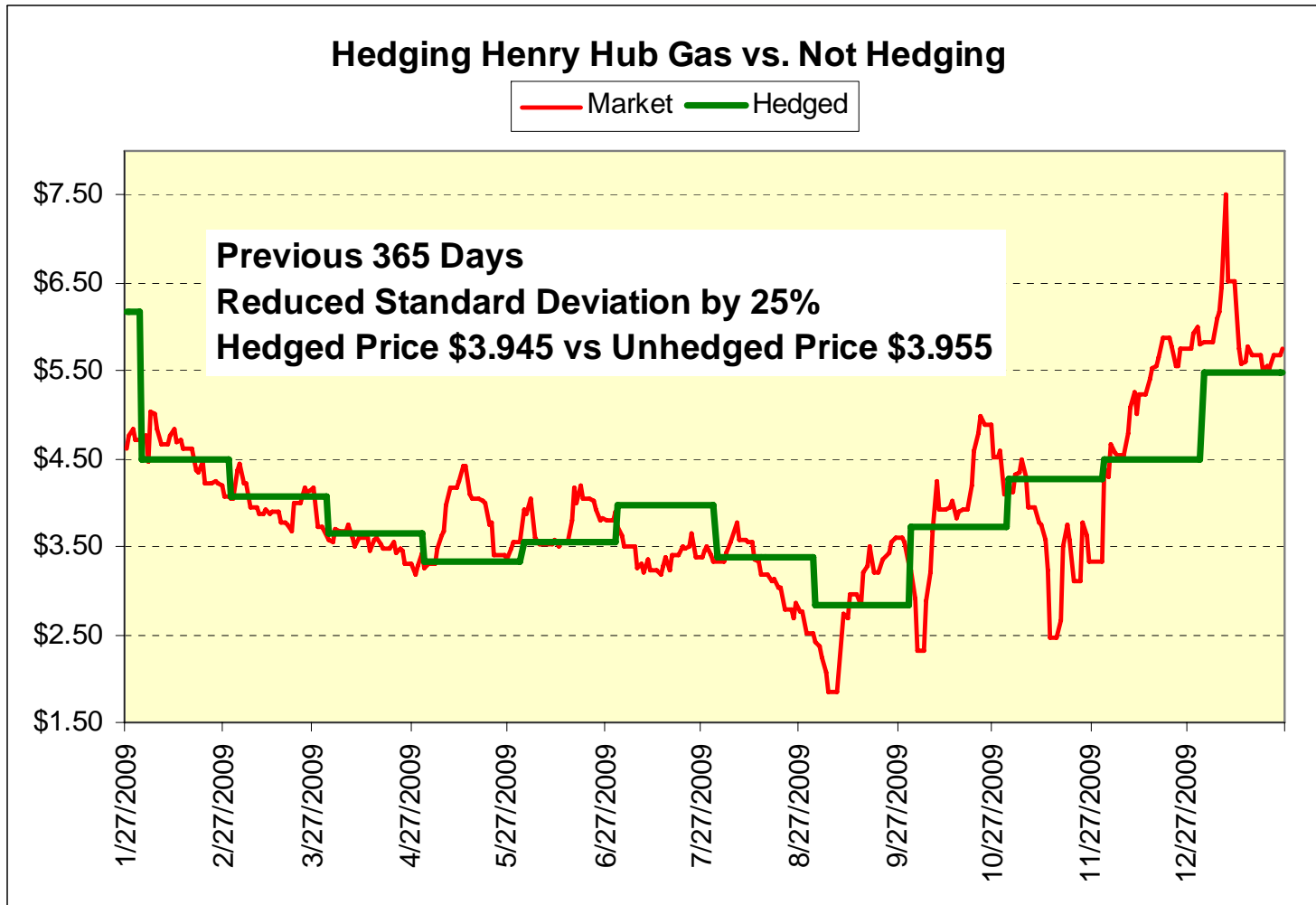
How It Works

- So you are swapping two cash flows; a fixed, for a floating – a “SWAP”
- It’s a contract for the difference of price, net settled each month
- You’ll continue to buy physical gasoline at the floating price
- Your next cost is today's fixed price for the next 12 months (actual physical + gain/(loss) on swap)
- Price locked in, no more uncertainty/volatility

How It Works

- Cost Stream
- Swap Purchase Price \$2.50
- Swap Settle Price (\$3.25) (75 cent gain on swap)
- Gasoline Purchase Price \$3.25 (75 cent cost increase)
- Net Gasoline Cost \$2.50

Natural Gas Example



Natural Gas Markets

- Active markets in forward natural gas are financial
 - Bilateral Swaps (OTC)
 - Exchange Future or Cleared Product

Choices to Obtain These Results

Bilateral Swaps (OTC)

- No initial margin
- Utilize unsecured lines of credit from quality counterparties
- Rigorous credit evaluations performed daily
- No maintenance margin if credit lines are not exceeded
- Collateral posted is permitted in the form of AA-rated Bank LoC instead of cash

Choices to Obtain These Results

Exchange Future or Cleared Product

- Have to post initial CASH margin – 9% of notional
- Daily maintenance margin posted in CASH
- Bank LoC not accepted

- Cash Burden Much Higher
- Tight budget without cash funding for hedging
- Increased costs will be passed on to consumers

Possible Consequences of Mandatory Clearing

- Cash requirements on utilities too demanding to continue hedging
 - Overall cost to borrow would increase – capital for infrastructure projects reduced and more expensive
 - Additional cost would be passed on to consumers
- Severely limit hedging of price volatility
 - Increased volatility in fuel prices puts other areas of the business at risk
 - Risk passed on the consumer where it can't be managed
 - Make their operation riskier
 - Potential credit risk to Utility