

Atmos Energy Marketing Storage Overview

April 2009



- AEM provides a variety of natural gas management services to municipal, utility and industrial customers.
- These services include storing gas using both proprietary and customer-owned transportation and storage assets.
- Storage activities generate margins from trading around AEM's owned and managed storage and transportation assets to capture time and location price differentials.

Risk Management



- AEM maintains a “flat” trading book and avoids mismatches between the volume of gas in storage and the number of associated financial hedges.
- AEM uses financial hedges to lock in an economic gross profit margin at the time it enters into a storage transaction.

MTM Accounting



- The relevant accounting rules require us to:
 - Mark our physical gas in storage to market, to reflect current cash prices at the end of the month and
 - Mark the related hedges to market, using futures prices that correspond with the term of our customer contracts.
- To determine current cash prices, we use an industry publication called Gas Daily and for our hedges, we use futures prices as quoted on the New York Mercantile Exchange (NYMEX).
- GAAP rules essentially cause us to measure the “liquidation” value of our gas in storage and the associated hedges as of the balance sheet date.

MTM Accounting (cont'd)



- Movements between these two indices create unrealized (i.e. “non-cash”) gains and losses at the end of each reporting period until the underlying transaction is executed (i.e., when gas is withdrawn from storage and delivered and the hedges are settled).
- These unrealized gains and losses are recorded in AEM’s gross profit.
- When the underlying transaction is executed, these unrealized gains and losses reverse themselves and the economic gross profit that AEM had captured in the original transaction is realized.

Conclusion



- Mark-to-market accounting treatment has introduced temporary yet significant earnings volatility to our business.
- Higher levels of gas in storage and wider spreads between cash and futures prices serve to magnify unrealized (non-cash) gains and losses.
- Because of the significance of these accounting adjustments, we report the economic gross profit associated with the transactions that we have entered into.

“Plain Vanilla” Storage Deal

June 2008 Storage



Commercial Transactions

- Buy 10,000 dth of natural gas in cash market for \$4.00 / dth from supplier.
- Hedge physical purchase by selling September 2008 NYMEX Future contracts at \$5.00 / dth.
- Transport gas and inject into AEM's leased physical storage facility.

	<u>(\$ / Dth)</u>
Futures Contracts sales price	\$ 5.00
Physical gas purchase costs	<u>(4.00)</u>
	<u>\$ 1.00</u>
	X 10,000 Dth

Economic Value of Gas margins: \$10,000 *

* Excludes \$0.40 / dth of storage and transport fees that are captured in Gross margins.

Accounting Entries – June 2008

Debit: Gas Inventory (B/S) \$40,000
Credit: A/P (B/S) \$(40,000)
(To record purchase of gas
for injection into storage inventory)

Reported GAAP P&L Results: \$0

July 2008 Storage



Market Price Changes

- September 2008 NYMEX Futures price Increase by \$0.50 / dth (From \$5.00 / dth to \$5.50 / dth).
- Cash (Gas Daily) price Increase by \$1.00 / dth (From \$4.00 / dth to \$5.00 dth)

Commercial Transactions

- None

Economic Results: No Change - \$10,000

Accounting Entries – July 2008

Debit: Unrealized MTM Loss –
Storage Futures (I/S) \$5,000
Credit: Risk Management
Liabilities (B/S) \$(5,000)

(To record MTM loss of
futures hedges)

Debit: Fair Value - Storage
Inventory (B/S) \$10,000
Credit: Unrealized Fair Value
Gain - Gas Inventory (I/S) \$(10,000)

(To record Unrealized Fair
Value Gain of Gas Inventory)

Reported GAAP P&L Results: \$5,000

August 2008 Storage



Market Price Changes

- September 2008 NYMEX Futures price decrease by \$0.50 / dth (From \$5.50 / dth to \$5.00 / dth).
- Cash (Gas Daily) price decrease by \$0.50 / dth (From \$5.00 / dth to \$4.50 dth)

Commercial Transactions

- Roll September financial position to October.
- Reverse hedge physical purchase by buying September 2008 NYMEX Future contracts at \$5.00 / dth.
- Hedge physical position by selling October 2008 NYMEX Future contracts at \$6.00 / dth.

Economic Results: \$20,000 (Increased by \$10,000)

Accounting Entries – August 2008

Debit: Risk Management Liabilities (B/S)	\$5,000
Credit: Unrealized MTM Loss - Storage Futures (I/S)	\$(5,000)
(To record reversal of MTM loss of futures hedges)	

Debit: Unrealized Fair Value Gain - Gas Inventory (I/S)	\$5,000
Credit: Fair Value - Storage Inventory (B/S)	\$(5,000)
(To record Unrealized Fair Value Loss of Gas Inventory)	

Reported GAAP P&L Results: \$0

September 2008 Storage



Market Price Changes

- October 2008 NYMEX Futures price decrease by \$0.50 / dth (From \$6.00 / dth to \$5.50 / dth).
- Cash (Gas Daily) price Increase by \$0.50 / dth (From \$4.50 / dth to \$5.00 dth)

Commercial Transactions

- None

Economic Results: \$20,000

Accounting Entries – September 2008

Debit: Risk Management
Assets (B/S) \$5,000
Credit: Unrealized MTM Gain
- Storage Futures (I/S) \$(5,000)
(To record MTM gain of
futures hedges)

Debit: Fair Value - Storage
Inventory (B/S) \$5,000
Credit: Unrealized Fair Value
Gain - Gas Inventory (I/S) \$(5,000)
(To record Unrealized Fair
Value Gain of Gas Inventory)

Reported GAAP P&L Results: \$10,000

October 2008 Storage



Market Price Changes

- October 2008 NYMEX Futures price settle at \$5.50 / dth.
- Cash (Gas Daily) prices settle at \$5.50 / dth.

Commercial Transactions

- Withdrawal, sell and deliver 10,000 dth of natural gas for \$5.50 / dth to customer.
- Buy October 2008 NYMEX Future contracts \$5.50 / dth to close / settle hedged position.

Economic Results: No Change: \$20,000

Accounting Entries – October 2008

Debit: Unrealized MTM Gain – Storage Futures (I/S)	\$5,000
Credit: Risk Management Assets (B/S)	\$(5,000)
(To record reversal of MTM gain)	
Debit: Cash in Margin Account (B/S)	\$5,000
Credit: Realized Gain – Storage Futures (I/S)	\$(5,000)
(To record realized gain on futures)	
Debit: Unrealized Fair Value Gain - Gas Inventory (I/S)	\$10,000
Credit: Fair Value – Storage Inventory (B/S)	\$(10,000)
(To reverse unrealized fair value gain)	
Debit: A/R (B/S)	\$ 55,000
Credit: Storage Gas Inventory (B/S)	\$(40,000)
Credit: Realized Gain from Sale of Inventory (I/S)	\$(15,000)
(To record sale of gas)	

Reported GAAP P&L Results: \$5,000

Summary



Economic Value

	<u>(\$ / Dth)</u>
Futures Contracts Sales price	\$ 6.00
<u>Less</u>	
Physical gas costs	<u>(4.00)</u>
Unit Gas Margin (Phys/Fin.)	\$2.00
	x <u>10,000 Dth</u>
Economic Value of Gas margins	\$20,000

Commercial Results

Unit Gas Margins	\$ 2.00
Transport / Storage fees	<u>0.40</u>
	\$ 1.60
	x <u>10,000 Dth</u>
Net Commercial margin	\$16,000

GAAP Results

<u>June 2008:</u>	\$ 0
<u>July 2008:</u>	5,000
<u>August 2008:</u>	0
<u>September 2008:</u>	10,000
<u>October 2008:</u>	5,000

GAAP Value of Gas Margins \$ 20,000

Accounting Results

Gas Margins	\$ 2.00
Transport / Storage fees	<u>0.40</u>
	\$ 1.60
	x <u>10,000 Dth</u>
Net GAAP margin	\$16,000

Storage Illustration

(Physical / Financial - Gas Margins *)



* Excludes storage and transport fees

Month	Inject Dth	Withdraw Dth	Gas Cost / Dth	Prompt Month Gas Daily Index / Dth	Hedge	Volume Dth	Hedge Price	Sept. 2008 Futures	Oct. 2008 Futures	Spread	P&L \$ MM	Economic Value \$ MM
June	10,000	0	\$4.00	\$4.00	Sell Futures	10,000	\$5.00	\$5.00	N/A	\$1.00	\$0	\$10,000
July	0	0	\$4.00	\$5.00	N/A	10,000	-	\$5.50	N/A	\$1.00	\$5,000	\$10,000
Aug	0	0	\$4.00	\$4.50	Buy/Sell Futures	10,000	\$6.00	\$5.00	\$6.00	\$1.00	\$0	\$10,000
Sept	0	0	\$4.00	\$5.00	N/A	10,000	-	\$5.00	\$5.50	\$2.00	\$10,000	\$20,000
Oct	0	10,000	\$4.00	\$5.50	Buy Futures	10,000	-	N/A	\$5.50	\$2.00	\$5,000	\$20,000
										Total	\$20,000	\$20,000

Commercial Optimization Strategy

Storage Optimization



Factors impacting optimization value

- Relationships of prices among forward months
- Time Value of Money
- Storage Cycling Costs
- Operational or contractual Space, injection, and withdrawal limitations

Strategies

- Roll forward buys to lower price months or forward sells to higher priced months, to the extent operational or contractual constraints are adhered to.
- Buy or sell in the cash market, against the forward market.

Note: AEM's market view also is a factor in determining the timing of spread executions.