

ILLUSTRATIVE HEDGING EXAMPLES

Ronald S. Oppenheimer

On behalf of

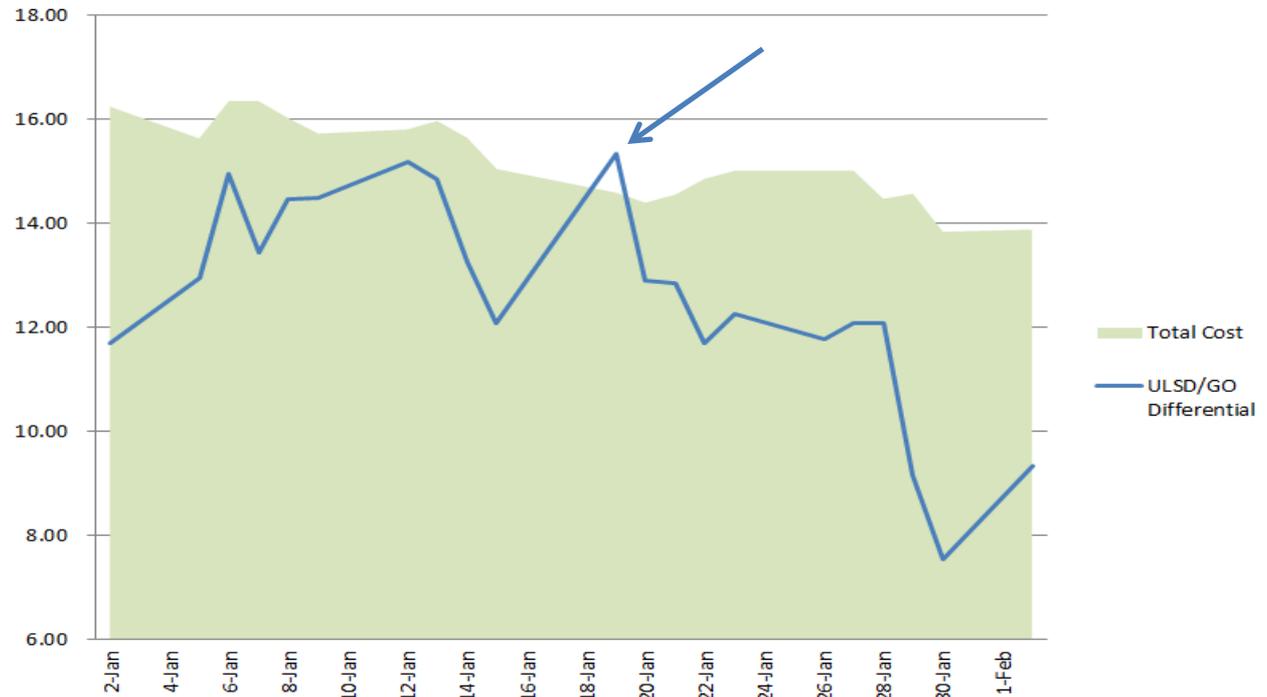
The Commercial Energy Working Group

Energy and Environmental Markets Advisory Committee Meeting
February 26, 2015

BUY OR SELL PHYSICAL AT A FLOATING PRICE – OTHER LEG OPEN

(Example 1, Pg. 20-21, CEWG February 10, 2014 Comment Letter)

<i>All in cpg</i>		19-Jan
ICE Feb. Gasoil	151.22	
NYMEX Feb. ULSD	166.56	
ULSD/GO Differential	15.34	
Freight (TC2)	7.26	
Other Est. Costs	7.32	
Total Costs	14.58	
Margin	0.76	



On January 19th, Importer:

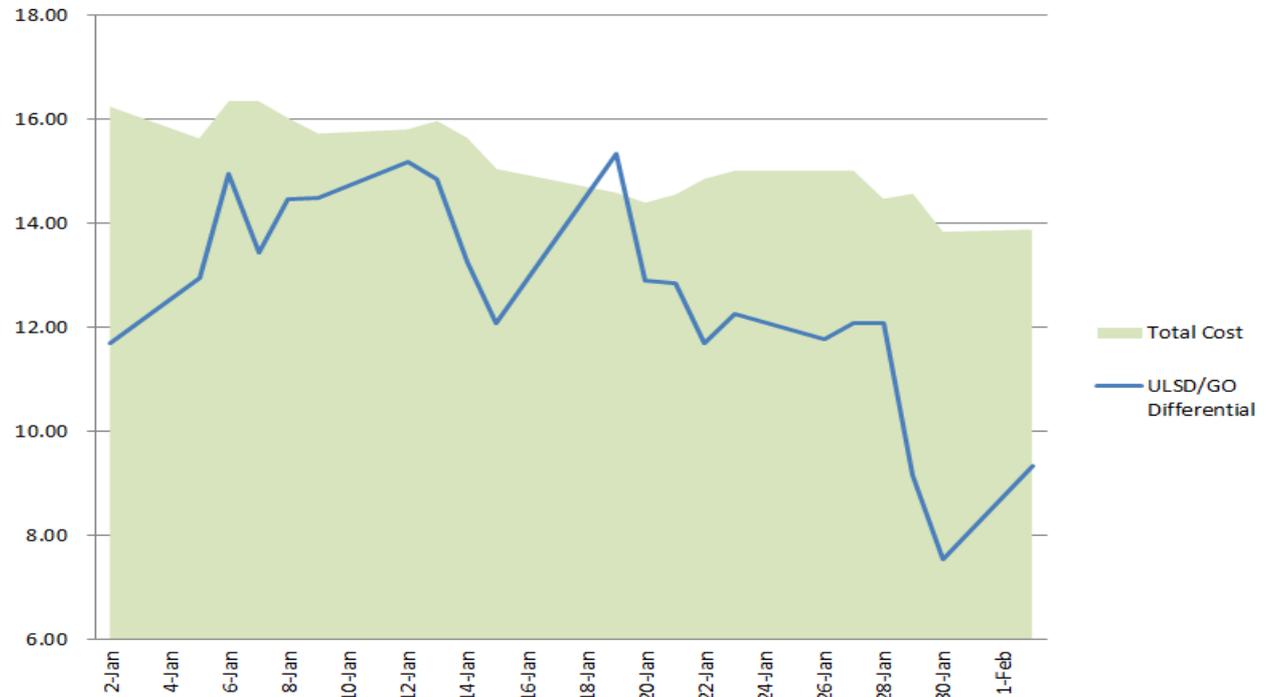
- Buys physical gasoil for forward delivery on a floating price based on ICE Feb. gasoil futures. It has not yet located a buyer for the gasoil, but intends to ship the gasoil to NYH and sell it on a floating price basis.
- Locks in the ULSD/GO Differential of 15.34 by buying ICE Feb. gasoil futures at 151.22 and selling NYMEX Feb. ULSD futures at 166.56.

NOTE: The short NYMEX ULSD futures would not qualify for BFH treatment under the Proposed Rule.

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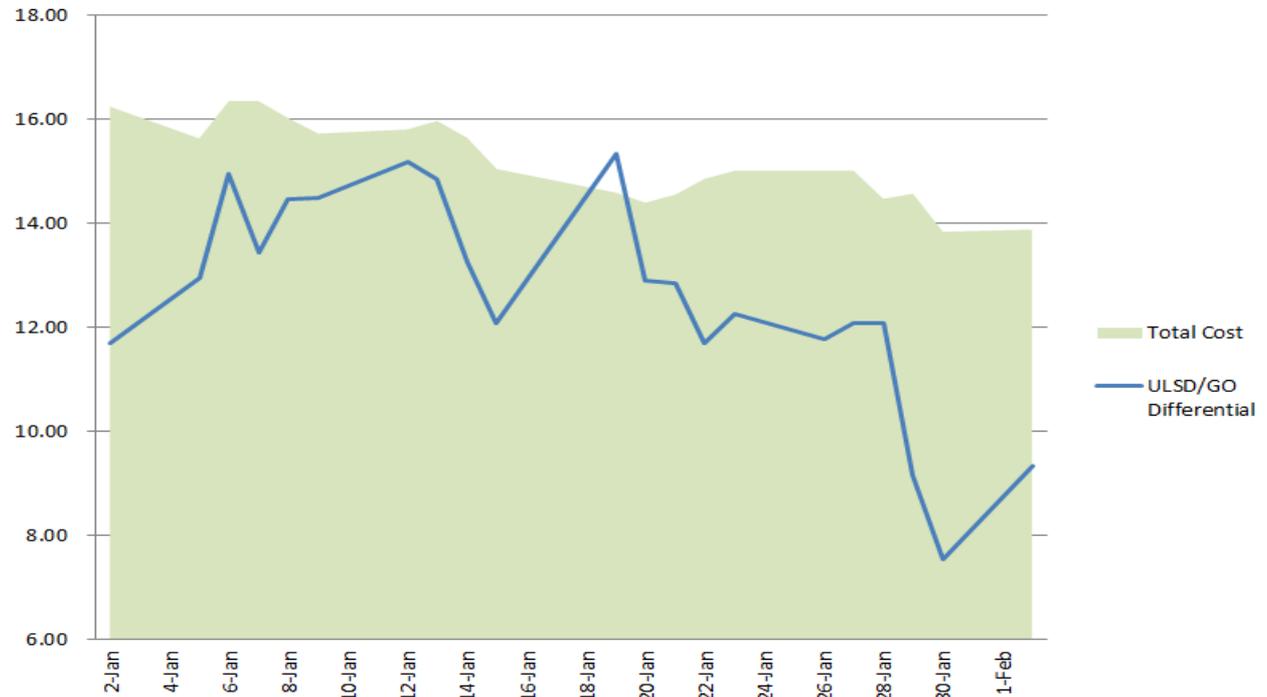
- On January 26th, Importer sells the physical product for delivery in NYH on a floating price based on Feb. NYMEX ULSD futures.

NOTE: The short Feb. NYMEX ULSD futures would now qualify for BFH treatment under the Proposed Rule.

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- On January 29th, both physical transactions are priced (buy physical at 152.68; sell physical at 161.84, representing revenue of 9.16 cpg). The futures spread is liquidated at the same prices (sell ICE Feb. gasoil at 152.68 and buy NYMEX Feb. ULSD at 161.84, representing a gain of 6.18 cpg).
- The revenue on the physical purchase and sale plus the gain on the hedge equals 15.34. Subtracting the costs of 14.58 yields the expected 0.76 cpg margin.
- Even though the price of ULSD has dropped by approximately 40% relative to gasoil (and by approximately 5 cpg in absolute terms), through the use of this hedging technique, Importer has protected its profit on the transaction.

BUY OR SELL PHYSICAL AT A FLOATING PRICE – OTHER LEG OPEN

(Example 1, Pg. 20-21, CEWG February 10, 2014 Comment Letter)

The Feb. NYMEX ULSD futures contracts in this example should be given BFH treatment through the time period Jan. 19 to Jan. 26 because:

- A. It was a substitute for a transaction to be made at a later time in a physical marketing channel (*i.e.* the sale of physical product in NYH);
- B. It was economically appropriate to the reduction of Importer's risk (*i.e.* that the relative value of the product in NYH would drop before it sold the physical product on a floating price basis); and
- C. It arose from the potential change in value of an asset (gasoil) that Importer owned (had contracted for).

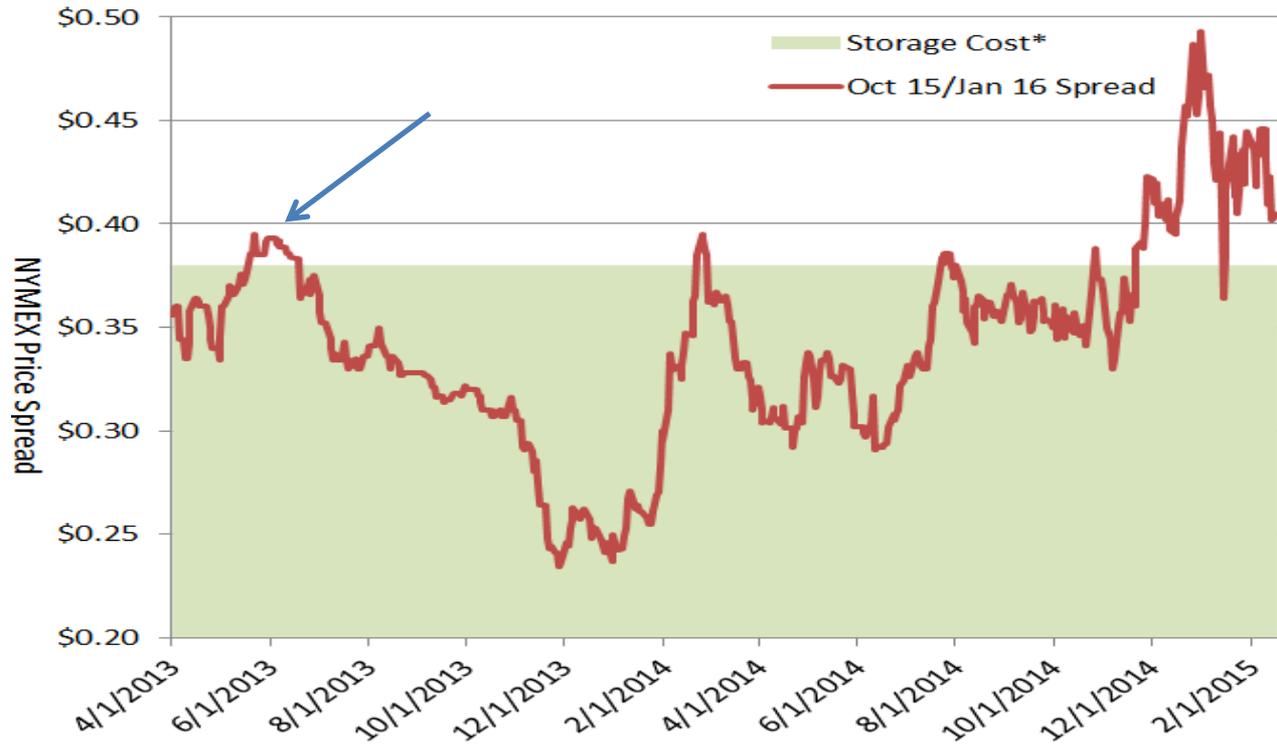
The consumer benefits because gasoil was imported to the United States in response to market signals, ultimately reducing the cost of fuel in the U.S.

The Importer would not have entered into this transaction without the ability to have hedged its risk.

WINTER STORAGE TRANSACTION

(Example 3, Pg. 24-25, CEWG February 10, 2014 Comment Letter)

\$ per mmbtu	3-Jun
Oct. '15 NG	4.2990
Jan. '16 NG	4.6920
Differential	0.393
Anticipated Cost	0.38
Margin	0.013



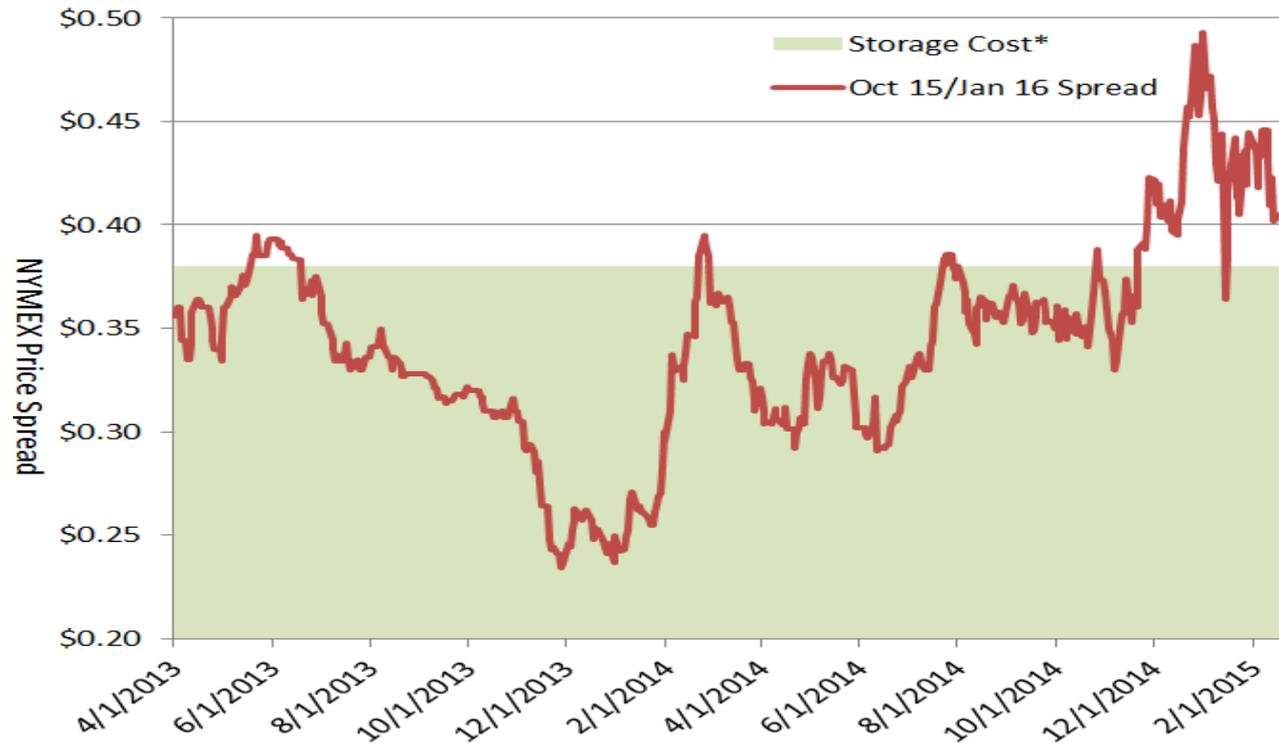
- In April 2013, Supplier decides to lease storage that will cost him \$.38/mmbtu to store natural gas during the winter of 2015-16.
- On June 3, Supplier enters into hedge transaction to lock in a profit based on the spread between its expected natural gas purchase and sale prices (buy Oct. NG futures contracts at 4.2990 and sell Jan. NG futures contracts at 4.6920).

NOTE: The October futures contracts and the January futures contracts would not qualify for BFH treatment under the Proposed Rule.

WINTER STORAGE TRANSACTION

(Example 3, Pg. 24-25, CEWG February 10, 2014 Comment Letter)

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Differential	0.393
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Margin	0.013



- In September 2015, Supplier will buy physical gas to fill the storage in October (and liquidate the Oct. NG futures contracts).
- In December 2015, Supplier will sell gas to be withdrawn from storage in January (and liquidate the Jan. NG futures contracts).

WINTER STORAGE TRANSACTION

(Example 3, Pg. 24-25, CEWG February 10, 2014 Comment Letter)

The winter storage transaction should be given BFH treatment because:

- A. It was a substitute for transactions to be made at a later time in a physical marketing channel (*i.e.* the purchase of natural gas to fill storage and withdraw from storage);
- B. It was economically appropriate to the reduction of Supplier's risk (*i.e.* that it will be able to recover the cost of its storage obligation and profit from its business of supplying natural gas in the winter); and
- C. It arose from the potential change in value of an asset (natural gas/storage) that Supplier owned (storage) and anticipated owning (natural gas).

Consumers benefit from this transaction because gas will be in storage, mitigating the risk (and cost) of a price spike during Winter '15-'16.

Supplier would not have entered into this transaction and committed to store natural gas without the ability to hedge its risk.

**n.b.* The storage hedge is also a valuable risk mitigation tool to a storage operator that has not leased its capacity.