Legislative, Finance and Administration Committee

Power Supply Hedges – Letter of Credit

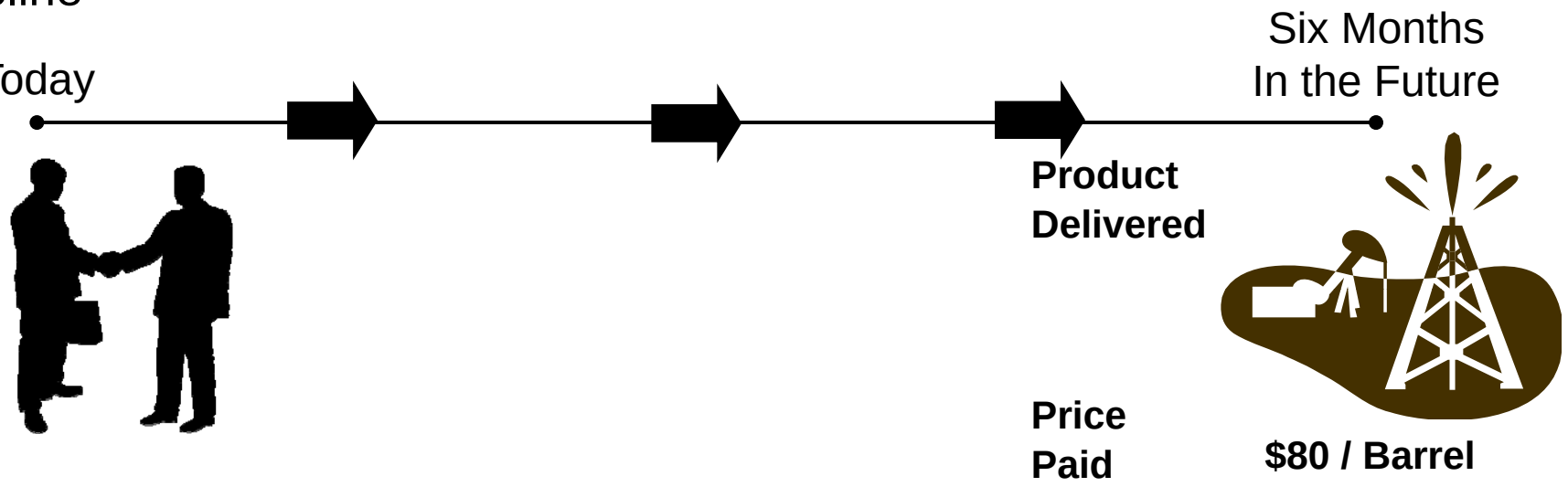
November 10, 2008

PACE

ATTACHMENT #1
LF&A Committee Meeting of 11/10/2008

Forward Contracts: A Future Obligation

Timeline



Two parties execute a legally binding contract

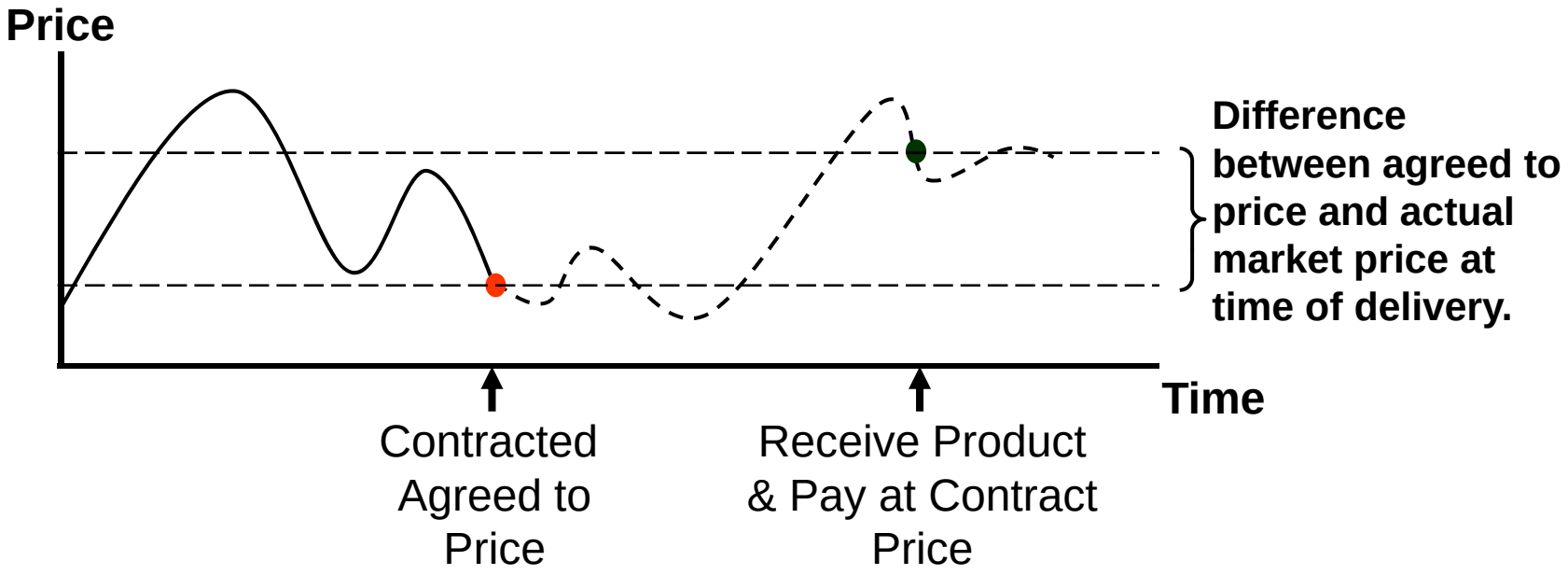
- The selling party will sell an agreed upon product on an agreed upon date and at an agreed upon price.
- The buying party pays at the future date and takes delivery of the product.

The parties satisfy their obligations by

- The selling party delivers the agreed upon product.
- The buying party pays the previously agreed to price and takes delivery.

Why Use Forward Contracts

1. Provides price certainty



2. Allows the City to buy its power supply at a set price for future delivery to minimize volatility in customer rates.

How to Value Forward Obligations

- When a party enters into a forward contract to buy a product the value of that obligation changes over time based on the market value of the product.

	Contract Executed	+3 Months	+6 Months
Current Date	12/1/2008	3/1/2009	6/1/2009
Delivery Date	9/1/2009	9/1/2009	9/1/2009
Product	1 Barrel	1 Barrel	1 Barrel
Contracted Agreed to Price	$80	$80	$80
Current Forward Market Price	$80	$70	$90
Value of Forward Contract	$0	-$10	+$10

When Prices Change Forward Contracts Result in a Loan Being Granted

- Buyer agrees to buy 1 Barrel of Oil on 6/1/2009 for $80.
- On 3/1/2009 the price of 1 Barrel of oil for delivery on 6/1/2009 is $50.
- Seller is happy to be selling at a price in excess of current market, but…
- …if buyer fails to buy, seller will realize a $30 loss.
- Therefore, the seller may require buyer to pay the $30 to ensure there can be no loss.
- But if seller believes buyer will fulfill the future obligation then he will not require an upfront payment.

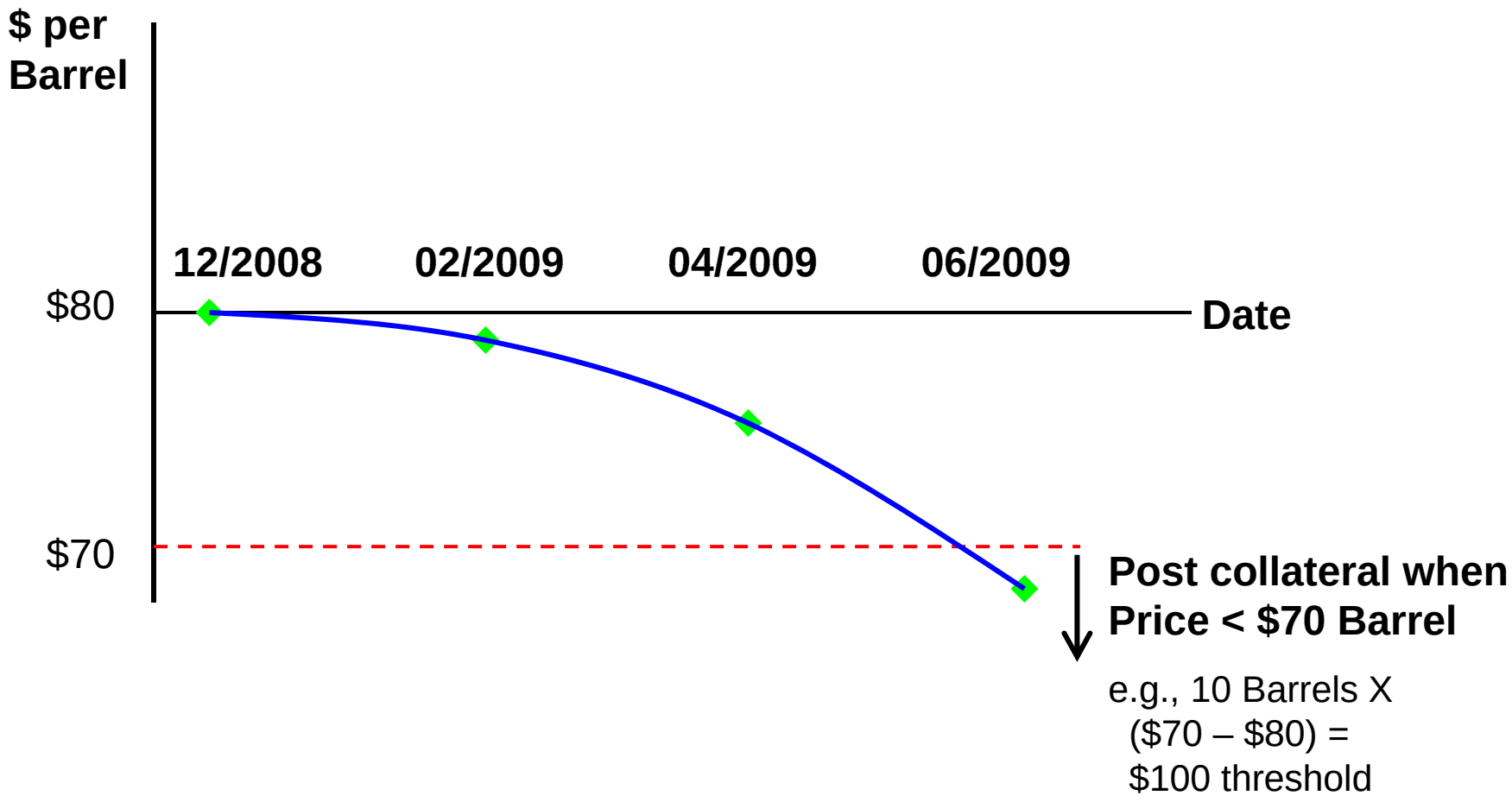
Buyers and Sellers in Forward Transactions Set Thresholds for Credit

- Assume Buyers and Sellers each agree to provide the other a $100 credit threshold. As long as the value of the forward contract(s) is less than $100 both parties are comfortable with their exposure
- If the value of the forward contract exceeds $100 then the parties have agreed that collateral must be provided to ensure the party fulfills their obligation

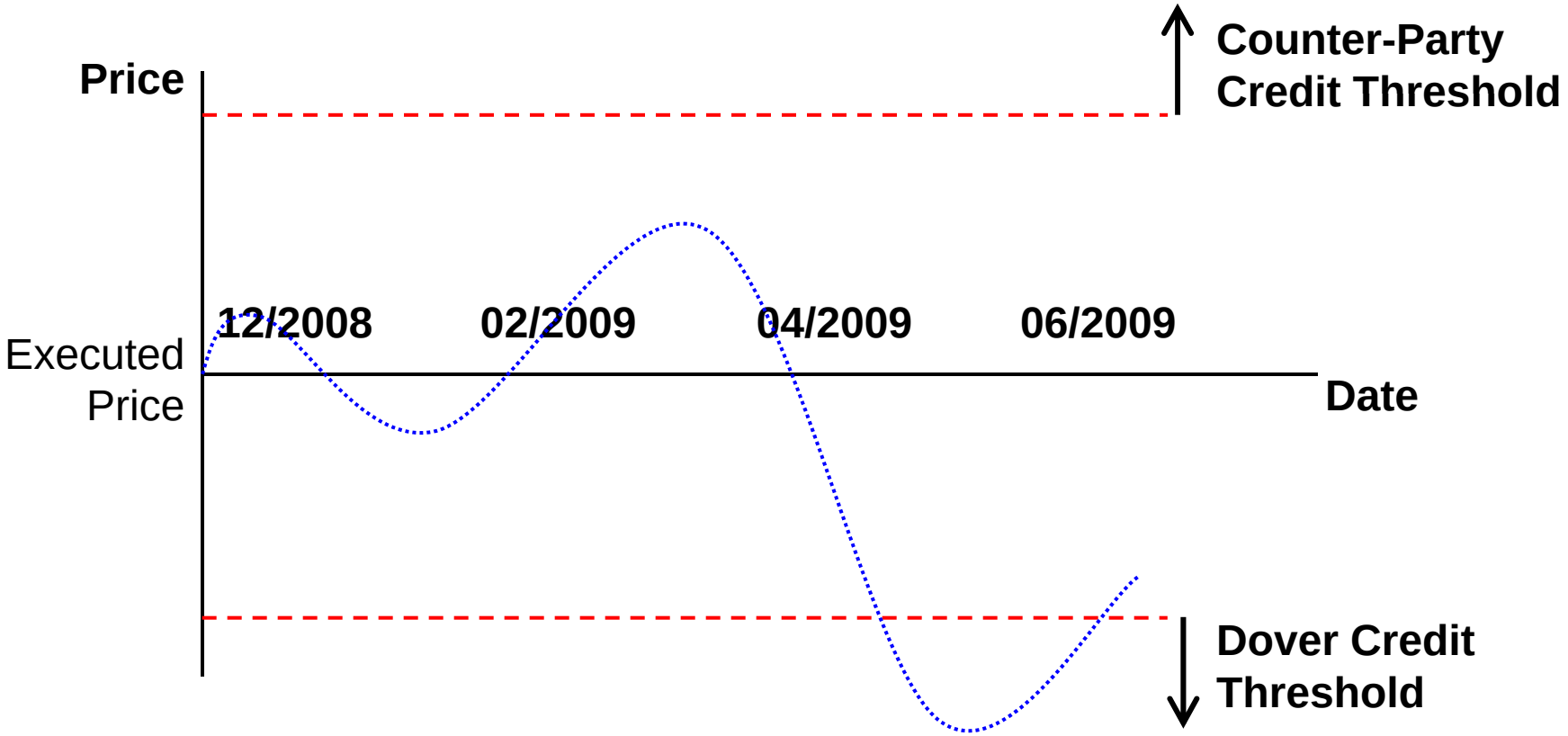
Example of How Credit Thresholds Manage Exposure: $100 Credit Threshold

	Contract Executed	+2 Months	+4 Months	+6 Months	+9 Months
Current Date	12/1/2008	2/1/2009	4/1/2009	6/1/2009	9/1/2009
Delivery Date	9/1/2009	9/1/2009	9/1/2009	9/1/2009	9/1/2009
Product	10 Barrels	10 Barrels	10 Barrels	10 Barrels	10 Barrels
Forward Agreed to Price	$80	$80	$80	$80	$80
Market Price	$80	$78	$74	$68	N/A
Delivery Price	N/A	N/A	N/A	N/A	$80
Value of Forward Contract	$0	($20)	($60)	($120)	$0
Credit Threshold	$100	$100	$100	$100	$100
Required Collateral	$0	$0	$0	$20	$0

Example of How Credit Thresholds Manage Exposure: $100 Credit Threshold, *An Alternative View*



Example of How Credit Thresholds Manage Exposure: $100 Credit Threshold, *An Alternative View*



Counterparty Thresholds

- Six Counterparties as of 9/30/08
- Credit Thresholds vary depending on credit rating and finances of the City and the Counterparty;
- Current thresholds
  - Two Counterparties at $10 million;
  - Three Counterparties at $15 million;
  - One Counterparty at $30 million;

Forward Contracts - Recap

- Forward Contracts are executed to lock in the price of future months' power supply currently in increments of 5, 10, 15 & 25 megawatts
- Creates a tiered effect in which one months supply will be made up of several incremental purchases
- Current incremental purchases go out to June 30, 2013
- The requirement to post collateral will go away when the incremental purchases are settled (delivery)