

Reported to the Board of Trustees
September 9, 2011

UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN • CHICAGO • SPRINGFIELD

Natural Gas & Electricity Procurement Program

Status Report to the
Board of Trustees

September 9, 2011

PROGRESS TO DATE

The procurement activity under the Board approved Natural Gas Cost Management Policy began in August 2008. At its March 2009 meeting, the Board approved the Energy Cost Management Policy to replace the Natural Gas Cost Management Policy. The new policy expanded purchasing authority to include other energy commodities (electricity and coal) and expanded the timeframe to a rolling three-year period.

Through July 2011 significant progress continues to be made in securing natural gas and electricity at a fixed price for fiscal years 2010-2014. All transactions have been reviewed by the *Energy Management Committee* (“Committee”). The University expects FY11 total fuel costs to equal the FY11 fuel budget at year end, in part due to the budget certainty which the transactions executed through the Energy Cost Management Policy provide the University.

NATURAL GAS

The natural gas transactions were executed using forward fixed-price purchase contracts with Nicor Enerchange. No futures contracts or other derivative products were employed. Table 1 below summarizes the Natural Gas hedging transactions through July 31, 2011.

Table 1: Summary of Natural Gas Procurement Program

Through July 31, 2011	FY2011	FY2012	FY2013	FY2014
Hedge Volume Requirement ¹ (MMBTU)	4,566,020	5,152,480	4,740,091	3,910,004
Volumes Purchased/Committed To Date (MMBTU)	5,423,247	5,207,722	4,077,617	1,029,986
Percent Purchased/Committed Volumes to Hedge Volume Requirement ¹	118.8%	101.1%	86.0%	21.7%
Budgeted Landed Price ² (\$/MMBTU)	\$ 7.63	\$ 5.77	\$ 5.75	\$ 5.72
Landed Price for Purchased/Committed Volumes ² (\$/MMBTU)	\$ 7.10	\$ 6.52	\$ 6.25	\$ 5.63

1. *Hedge Volume Requirement = Must Run Gas Requirements to produce thermal needs only*

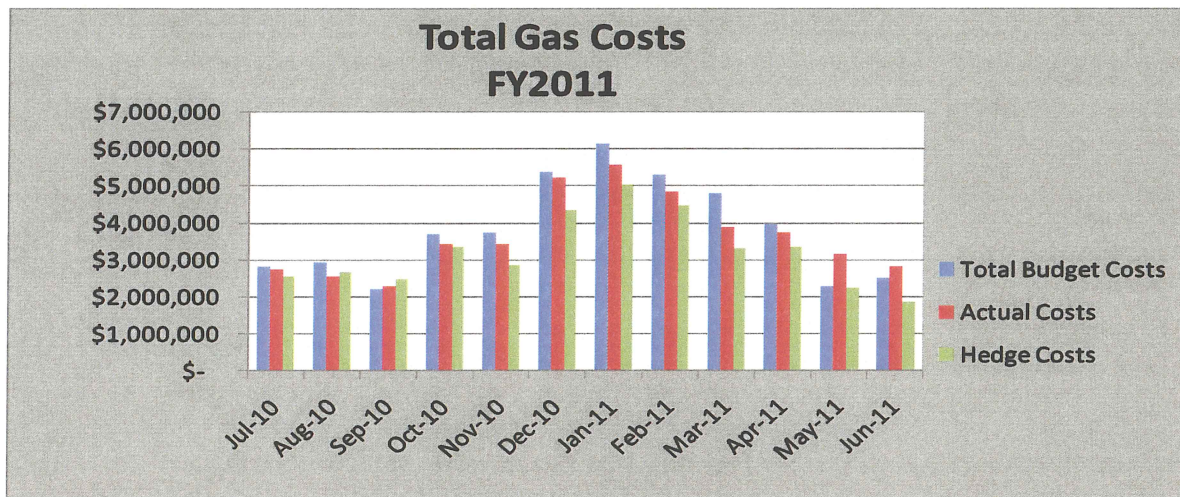
2. *Landed Price = field price + basis + Nicor Enerchange fee + NGPL fees.*

During 2010 natural gas requirement forecasts were substantially decreased by campus operations to take into consideration recent conservation efforts and projected asset availability.

This has resulted in decreased natural gas requirements causing an over-hedged position for FY11. A plan to address the surplus has been implemented which requires a monthly review of updated natural gas requirements and FOM (First-of-Month) gas pricing.

A graphical analysis of FY11 natural gas cost and volume activity is attached. FY12-FY14 activity is reported in Table 1 on page 1 of this report. The graphs included in this report present the natural gas hedging pricing activity as directed by the Energy Cost Management Policy and the inherent impact of any changes to the demand forecast on the total procurement activity.

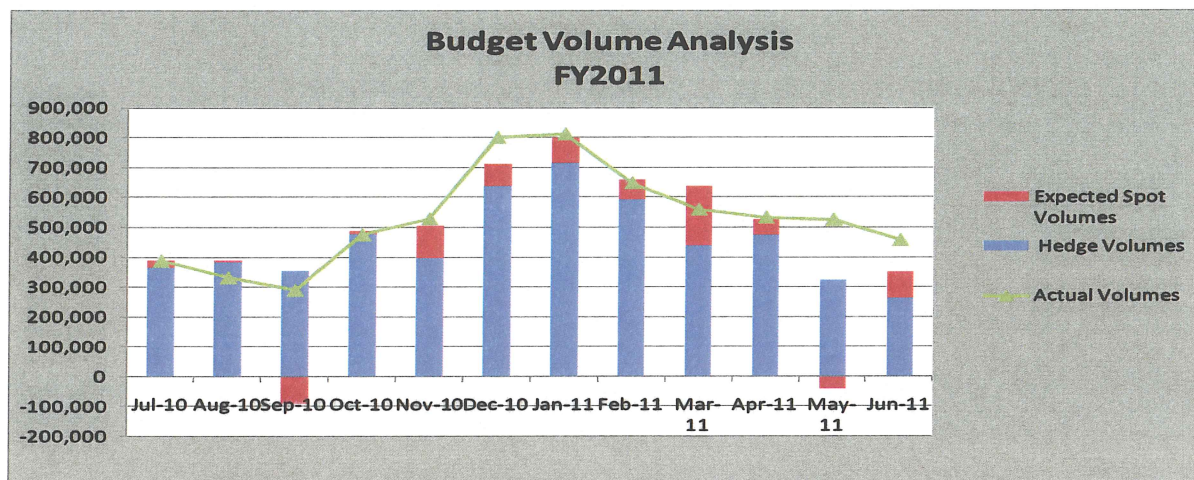
The Total Gas Costs Graph presents a comparison between the delivered cost of total gas required and the delivered cost of the hedge gas commitments providing a view of the financial impact of the Energy Policy. The total gas budget is included to highlight the budget to actual results.



- Total Budget is defined as all natural gas anticipated to be consumed during each month.
- Natural gas transactions continue to result in below budget costs through June 2011.
- Hedges for FY2011 were executed beginning in September 2008 with the majority being transacted in time to provide a high degree of budget certainty for fiscal year 2011.
- Total Budget Cost through June 2011 is \$46.0m with Actual Cost equaling \$43.7m.

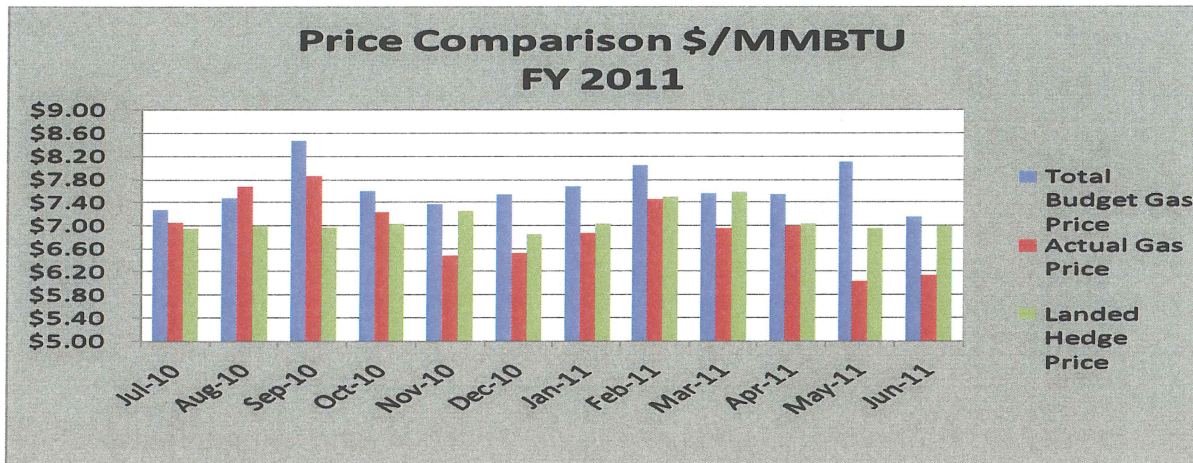
The Budget Volume Analysis Graph presents the total gas volumes budgeted, separated between hedge gas commitments and the amount of expected spot purchases required to meet the University's total natural gas requirements. The graph is intended to provide a view of the gas hedging activity as directed by the Energy Policy and the inherent impact of any changes to the

demand forecast on the total procurement activity. Actual volumes consumed are included to highlight the budget to actual results.



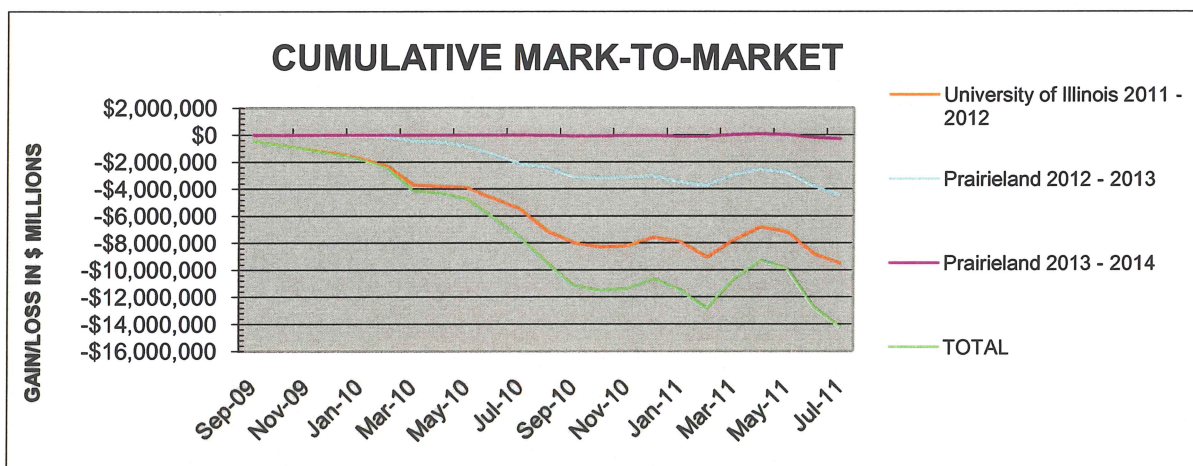
- *Hedge Volumes plus Expected Spot Volumes is defined as all natural gas anticipated to be consumed during each month.*
- *Differences between Hedged Volumes and Actual Volumes is a result of purchases or sales made in the spot market to satisfy the natural gas requirements.*
- *Hedges for FY2011 were executed beginning in September 2008 with the majority being transacted in time to provide committed natural gas prices for the development of the plant operating strategies.*
- *The Total Budgeted Volume through June 2011 is 6.0m mmbtu while Actual Volumes total 6.4m mmbtu.*

The Price Comparison \$/MMBTU Graph presents a comparison between the per-unit delivered cost of the hedge gas commitments and the per-unit delivered cost of total gas burned (hedge purchases plus spot purchases) providing a view of the impact of the spot market transactions on the effective per-unit price of natural gas. The total gas budget price is included to highlight the budget to actual results.



- The Total Budget Gas Price is defined as the blended price of the hedging activity and the expected spot purchases.
- Differences between Hedge Price and Actual Gas Price is a result of purchases or sales made in the spot market to satisfy the remaining natural gas requirements.
- The Actual Gas Price is less than Hedge Price in some months due to daily spot prices being less than hedged price.
- The average Total Budget price of natural gas through June 2011 is \$7.63/mmbtu while the average Actual Gas Price through June 2011 is \$6.88/mmbtu.

The Cumulative Mark to Market Graph provides a review of the cumulative difference between the market price of natural gas and the forward contract prices paid by the University for all open contracts as of June 30, 2011.



- Mark to Market depicts the unrealized cumulative difference between the market price and the hedge price. The university initiated its hedging program when prices were relatively high versus today's prices but as the program continues the difference is decreasing. The graph identifies the gap is closing significantly with gas purchased for FY12 thru FY14.

ELECTRICITY

The electricity transactions were executed using fixed price block purchases with American Electric Power Service Corp and Exelon Generation. Fixed price block purchases of electricity have been contracted for delivery during fiscal years 2011-2014 as outlined in Table 2 below. No futures contracts or other derivative products were employed.

Table 2: Summary of Electricity Procurement Program

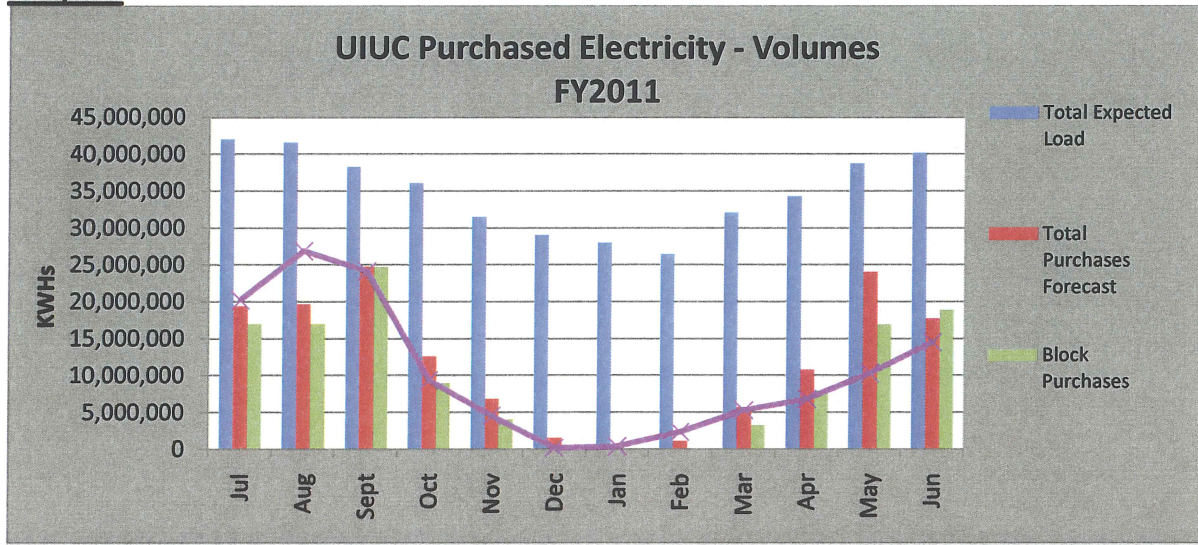
Through July 31, 2011	2011		2012		2013		2014	
	UIUC	UIC	UIUC	UIC	UIUC	UIC	UIUC	UIC
Volumes Committed to Date (mwh)	118,711	122,298	105,900	109,968	87,256	76,190	21,088	9,509
Total Forecasted Purchased Electricity (mwh) ¹	144,807	175,545	234,505	175,545	146,688	175,545	146,688	175,545
Total Forecasted Electric Load (mwh) ¹	417,796	319,484	428,591	319,484	420,910	319,484	420,910	319,484
% of Forecasted Electric Load	28.41%	38.28%	24.71%	34.42%	20.73%	23.85%	5.01%	2.98%
Total Dollars Committed (millions) ²	\$3.57	\$3.98	\$3.19	\$3.64	\$2.68	\$2.59	\$0.77	\$0.37
Block Price for Committed Volumes (\$/mwh) ²	\$30.07	\$32.56	\$30.09	\$33.08	\$30.75	\$34.02	\$36.44	\$38.60

1. Does not include the electricity requirements for the Petascale project
2. Energy only
3. Forecasts revised 3/2011

A graphical analysis of FY11 electricity cost and volume activity is attached. FY12-FY14 activity is reported in the above Table 2. These campus specific graphs present the power hedging activity as directed by the Energy Cost Management Policy and the inherent impact of any changes to the demand forecast on the total procurement activity. The graphs are presented as campus specific in order to replicate the procurement transactions which are campus specific.

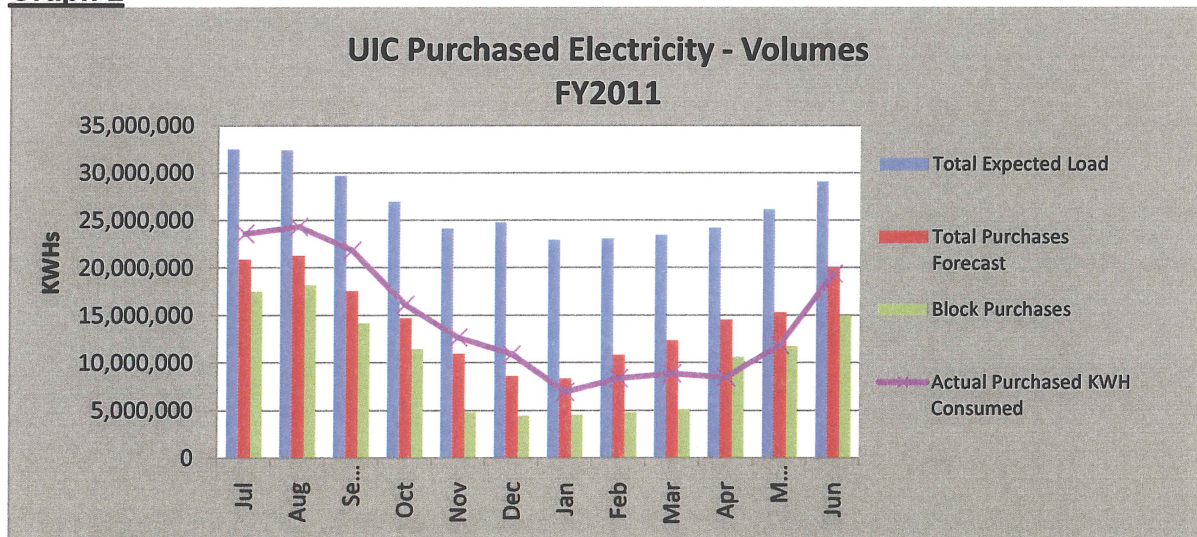
Graph 1 and Graph 2 present the results of all purchased electricity transactions for FY11 through June 2011. The total expected electricity load, the total load expected to be purchased and of that forecast how much has been purchased with fixed price block purchases are identified. Actual volumes consumed are included to highlight the budget to actual results.

Graph 1



- Differences between Block Purchases and Total Purchases Forecast is a result of purchases that are expected to be made in the spot market to satisfy the campus electricity requirements based on the operating plans.
- Total Purchases Forecast through June 2011 is 144,807 mwhs and the Actual Purchased Consumed is 124,874 mwhs.
- The variance between Total Purchases Forecast and the Actual Purchased KWH Consumed in August is a result of a change in asset availability.

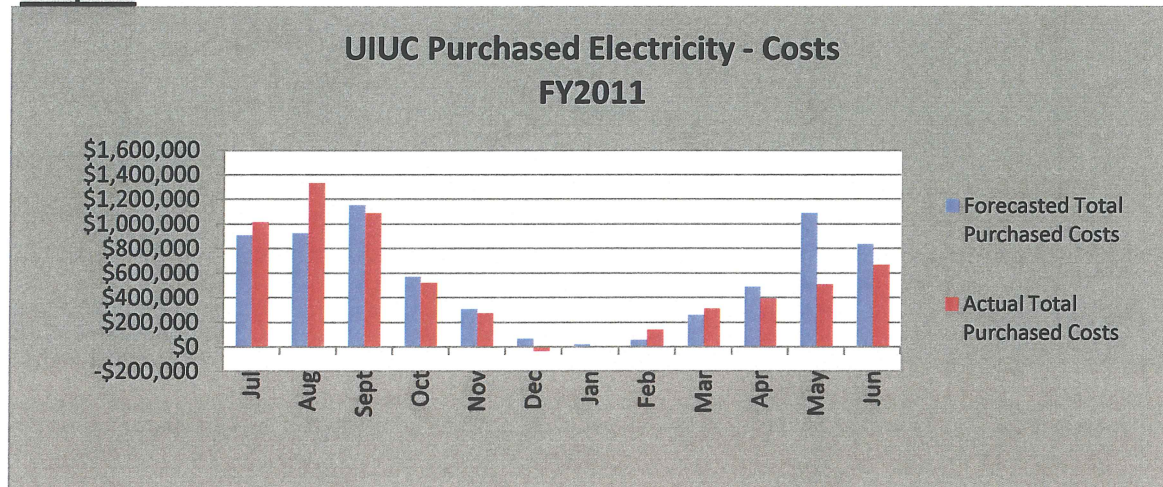
Graph 2



- Differences between Block Purchases and Total Purchases Forecast is a result of purchases that are expected to be made in the spot market to satisfy the campus electricity requirements based on the operating plans.
- Total Purchases Forecast through June 2011 is 175,545 mwhs and the Actual Purchased Consumed is 173,439 mwhs.
- The variance between Total Purchases Forecast and the Actual Purchased KWHs Consumed is constant during the summer months and draws closer to parity in the winter months.

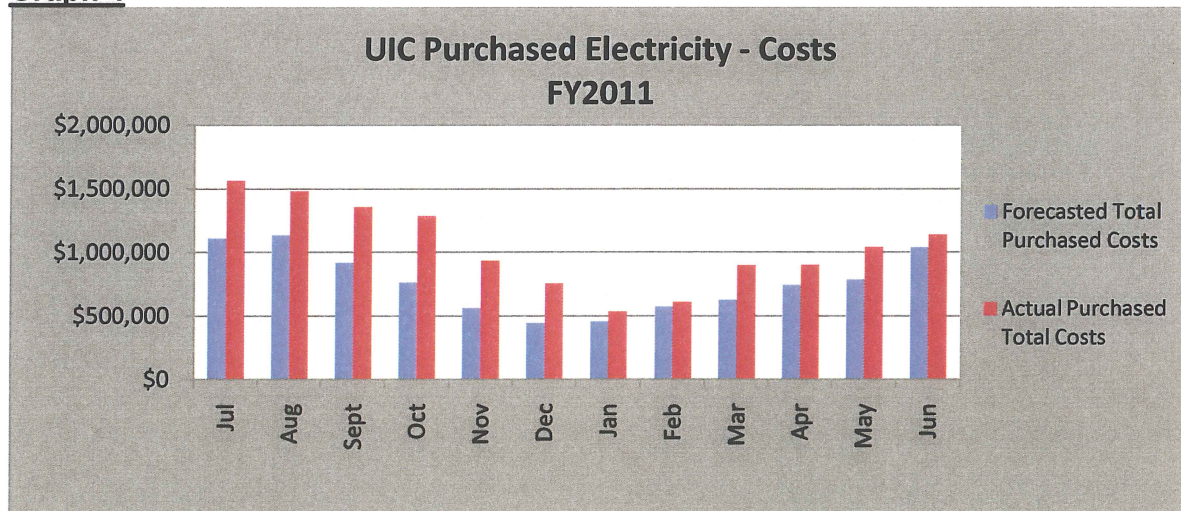
Graph 3 and Graph 4 present the results of all purchased electricity transactions for FY11 through June 2011. The costs of the total load expected to be purchased and the actual volumes purchased are included to highlight the budget to actual results.

Graph 3



- The variance in August between Forecasted Total Purchased Costs and the Actual Total Purchased Costs is a result of change in asset availability.
- The positive impact of excess generation as a result of meeting steam requirements is apparent during the winter months.
- The Mark to Market position for UIUC is slightly favorable by approximately 3%.

Graph 4



- The variance between Actual Total Costs and Forecasted Total Costs is being driven by higher than anticipated purchases and a higher than forecasted cost of capacity.
- The Mark to Market position is slightly favorable by approximately 4%.

PREVIOUSLY SUPPLIED BACKGROUND INFORMATION

OVERVIEW

At the September 2008 meeting of the Board of Trustees, Walter Knorr, Vice President/Chief Financial Officer and Comptroller, presented and received approval of the Natural Gas Cost Management Policy. Among other things, the policy authorized natural gas purchases for fiscal years 2010 and 2011, with certain restrictions. At its March 2009 meeting, the Board approved the Energy Cost Management Policy to replace the Natural Gas Cost Management Policy. The new policy expanded purchasing authority to include other energy commodities (electricity and coal) and expanded the timeframe to a rolling three-year period.

A strategy for procuring natural gas and electricity within the policy framework was developed with assistance from our external advisors, Nicor Enerchange, Brubaker and Associates, Inc., and Larry Altenbaumer. The primary objectives of the strategy are to provide budget certainty and to stabilize the price of purchased fuel/energy to the University.

The strategy has three primary components - (i) a rolling 36-month series of regularly timed purchases, (ii) budget management for the 36 months, and (iii) an opportunistic purchase program based on aggressive pricing targets.

- i. The program is designed to even out over time the University's exposure to the spot market and the risk of price spikes; it functions similarly to a "dollar-cost averaging" investment strategy.
- ii. The 36 month term provides a high degree of budget certainty (financial risk management) for the fiscal budget periods affected by allowing purchases up to 95% for the first 12 months, 90% for the second 12 months, and 85% for the third 12 months of the natural gas required to meet the University's thermal load.
- iii. The opportunistic purchases program incorporates a capability to increase purchases for a particular period. Consideration is based on variances between currently available market pricing and the established budgeted target price coupled with consideration of levels of actual committed purchases relative to target purchase commitments levels for the specified period.

BACKGROUND ON SUPPLIERS

- **Natural Gas Supply** – The forward purchase contracts for natural gas are with Nicor Enerchange, who stands between the University and the originating field suppliers. Nicor Enerchange is contractually responsible for covering damages if it fails to deliver the nominated amount of gas to the University's specified delivery points under an existing agreement with the University that runs through June 2016. Nicor Enerchange is owned by Nicor, Inc. In December 2010, Nicor, Inc. was purchased by AGL Resources, Inc., an energy services holding company whose principal business is the distribution of natural gas in six states. Based on customer count, over 2.3m, AGL is the largest natural gas distributor in the Southeast and mid-Atlantic regions.
- **Natural Gas Transportation** – The natural gas referred to above is transported between the gas fields and the University by Natural Gas Pipeline Company of America ("NGPL"). NGPL owns in whole or in part over 10,000 miles of interstate pipelines and is a subsidiary of Kinder Morgan (one of the largest pipeline transportation and energy storage companies in North America with approximately 37,000 miles of pipelines). The two firm transportation agreements between the University and NGPL expire April 30, 2015 (MDQ of 5,000 MMBTU/day) and June 30, 2015 (MDQ of 10,000 MMBTU/day). The Peoples Gas Light and Coke Company, a regulated local gas distribution company, provides transportation from the Chicago City Gate to the UIC campus and storage services under a contract which expires June 30, 2015.
- **Power Supply** – Fixed price block purchases of electricity are transacted under a Master Power Purchase and Sale Agreement between American Electric Power Service Corp. ("AEP") for fiscal years 2011-2014. AEP, the parent, owns over 39,000 megawatts of generating capacity in the U.S. and a 39,000-mile transmission network that includes 2,116 miles of 765 kilovolt transmission lines. Exelon Generation has one of the industry's largest portfolios of electricity generation capacity, with a nationwide reach in the Midwest and Mid-Atlantic. It is the largest owner/operator of nuclear plants in the United States. Exelon, the parent company, has U.S. Generating Resources/Capacity of 31,003 megawatts (2009)
- **Power Delivery** – Delivery of the contracted block purchases is provided by AmerenIP to the UIUC campus and by Commonwealth Edison to the UIC campus.

The creditworthiness of these suppliers is monitored regularly to review their financial positions and to ensure counterparties do not become a risk to the University. This monitoring is consistent with the requirements of the Derivatives Use Policy approved by the Board of Trustees in July 2010.