Reported to the Board of Trustees **January 20**, **2011**



Natural Gas & Electricity Procurement Program

Status Report to the Board of Trustees

January 20, 2011

Natural Gas and Electricity Procurement Program

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 make incremental purchases beyond the "dollar-cost averaging" strategy 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.

PROGRESS TO DATE

The procurement activity under the Policy began in August 2008. Through December, 2010 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 natural gas transactions were executed using forward fixed-price purchase contracts with Nicor Enerchange. The electricity transactions were executed using fixed price block purchases with American Electric Power Service Corp. No futures contracts or other derivative products were employed.

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 for FY11 has been developed that requires a monthly review of updated natural gas requirements and FOM (First-of-Month) gas pricing.

Table 1 below summarizes the Natural Gas procurement activity through November 30, 2010.

Through December 31, 2010	FY2011	FY2012	FY2013	FY2014
Hedge Volume Requirement ¹ (MMBTU)	4,566,020	5,152,480	4,740,093	4,740,093
Volumes Purchased/Committed To Date (MMBTU)	5,423,968	5,196,709	3,711,732	276,963
Percent Purchased/Committed Volumes to Hedge Volume Requirement ¹	118.8%	100.9%	78.3%	5.8%
Budgeted Landed Price ² (\$/MMBTU)	\$7.72	\$5.72	\$5.76	\$5.76
Landed Price for Purchased/Committed Volumes ² (\$/MMBTU)	\$7.21	\$6.60	\$6.41	\$5.73

Table 1: Summary of Gas Procurement Program

- 1. Hedge Volume Requirement = Must Run Gas Requirements to produce thermal needs only
- 2. $Landed\ Price = field\ price + basis + Nicor\ Enerchange\ fee + NGPL\ fees.$

Comment [tlt1]: This is for all 12 months.

Fixed price block purchases of electricity have been contracted between American Electric Power Service Corporation and Prairieland Energy, Inc. for delivery during fiscal years 2011-2014 as outlined in Table 2 below. All transactions have been reviewed by the *Committee*.

Through December 31,				
2010	FY2011	FY2012	FY2013	FY2014
Volumes	114,854 (UIUC)	96,758 (UIUC)	86,303 (UIUC)	19,310 (UIUC)
Committed to	122,261 (UIC)	109,967 (UIC)	76,190 (UIC)	5,332 (UIC)
Date (mwh)				
Total Forecasted	155,016 (UIUC)	154,033 (UIUC)	146,688 (UIUC)	146,688 (UIUC)
Purchased	155,502 (UIC)	155,502 (UIC)	155,502 (UIC)	155,502 (UIC)
Electricity* (mwh)				
% of Forecasted	74.1% (UIUC)	62.8% (UIUC)	58.8% (UIUC)	13.2% (UIUC)
Purchases	78.6% (UIC)	70.7% (UIC)	49.0% (UIC)	3.4% (UIC)
Total Forecasted	428,591 (UIUC)	428,591 (UIUC)	417,796 (UIUC)	417,796 (UIUC)
Electric Load	299,543 (UIC)	299,543 (UIC)	299,543 (UIC)	299,543 (UIC)
(mwh)*				
% of Forecasted	26.8% (UIUC)	22.6% (UIUC)	20.7% (UIUC)	4.6% (UIUC)
Electric Load	40.8% (UIC)	36.7% (UIC)	25.4% (UIC)	1.8% (UIC)
Total Dollars	\$3,462,848 (UIUC)	\$2,917,254(UIUC)	\$2,602,035 (UIUC)	\$582,197 (UIUC
Committed	\$3,973,483 (UIC)	\$3,573,928 (UIC)	\$2,476,175 (UIC)	\$173,290 (UIC)
Block Price for	\$30.15 (UIUC)	\$30.15 (UIUC)	\$30.15 (UIUC)	\$30.15 (UIUC)
Committed Volumes (\$/mwh)	\$32.50 (UIC)	\$32.50 (UIC)	\$32.50 (UIC)	\$32.50 (UIC)

Table 2: Summary of Electricity Procurement Program

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").

^{1.} Block price is the cost of the energy only.

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.
- **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.

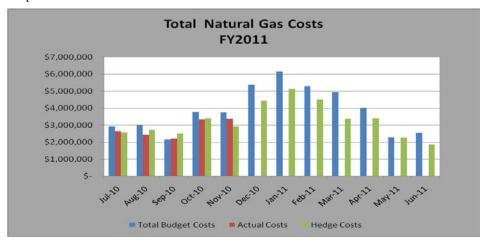
FEES

Nicor Enerchange provides the University with market advice, transaction execution, analytical and other services. Nicor Enerchange charges the University 2.5¢/MMBTU for providing these services. Beginning with the fiscal year 2013 forward contracts, transactions are executed under an agreement with Prairieland Energy, Inc. expiring on June 20, 2016. The fee for these services decreases to 2.0¢/MMBTU beginning with the fiscal year 2013 transactions.

GRAPHICAL ANALYSIS OF NATURAL GAS AND ELECTRICITY ACTIVITY

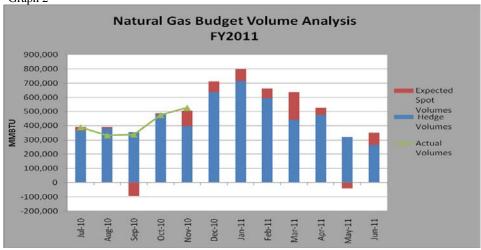
- A graphical analysis of FY11 natural gas cost and volume activity is attached. FY12-FY14 activity is reported in Table 1 on page 2 of this report.
- Graph 1 Total Gas Costs presents a comparison between the delivered cost of total gas
 required and the delivered cost of the hedge gas commitments providing a view of the
 financial impact of the Energy Policy. The total gas budget is included to highlight the
 budget to actual results.
- Graph 2 Budget Volume Analysis presents the total gas volumes budgeted, separated between hedge gas commitments and the amount of expected spot purchases required to meet the total 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.
- Graph 3 Price Comparison \$/MMBTU 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 lower spot prices on the effective per-unit price of natural gas. The total gas budget price is included to highlight the budget to actual results.
- Graph 4 Cumulative Mark to Market 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 11/30/10.
- Graph 5 UIUC Electricity Hedges vs Forecasts presents the comparison of UIUC's total
 forecasted load, the total forecasted load to be purchased at UIUC and the electricity
 purchased via block purchases for UIUC.
- Graph 6 UIC Electricity Hedges vs Forecasts presents the comparison of UIC's total forecasted load, the total forecasted load to be purchased at UIC and the electricity purchased via block purchases for UIC.

Graph 1



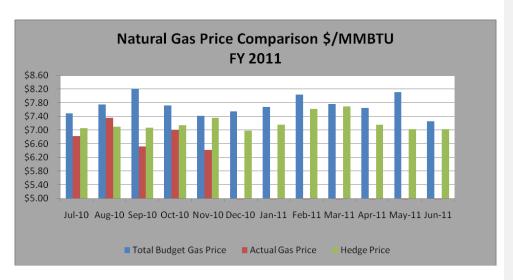
- Total Budget is defined as all natural gas anticipated to be consumed during each month.
- Natural gas transactions continue to result in below budget costs through November, 2011.
- Hedges for FY2011 were executed beginning in September, 2008 with the majority being transacted in time to provide a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

Graph 2



- 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 made in the spot market to satisfy the remaining 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.

Graph 3



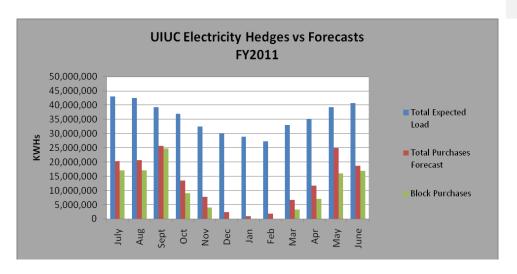
- The Total Budget Gas Price is defined as the blended price of the hedging activity and the expected spot purchases.
- Differences between Hedge costs and Actual costs is a result of purchases made in the spot market to satisfy the remaining natural gas requirements.
- The Actual Gas Price is less than Hedge Price due to daily spot prices being less than hedged price.

Graph 4



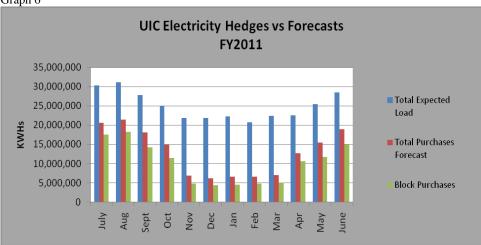
Mark to Market depicts the unrealized cumulative difference between the market price and the hedge price. The
university initiated its hedging program when prices were relatively high versus today's prices but as the
program continues the difference is decreasing.

Graph 5



- Total expected load includes all electricity required to meet campus demand.
- Total purchases forecast are the kwhs anticipated to be purchased to meet campus demand not met by generation.
- Total block purchases are the kwhs committed to be purchased at a fixed price.

Graph 6



- Total expected load includes all electricity required to meet campus demand.
- Total purchases forecast are the kwhs anticipated to be purchased to meet campus demand not met by generation.
- Total block purchases are the kwhs committed to be purchased at a fixed price.