Reported to the Board of Trustees September 8, 2016



Derivatives Use Report

- Summary
- Dashboard

July 31, 2016

Prepared By Enterprise Risk Management

Hedging Summary

Introduction

As determined by the University's Derivatives Use Policy (The Policy) which was approved by the Board of Trustees in July 2010 and updated November 2014, the University's exposure to an individual counterparty is measured by the Net Termination Exposure (NTE). The Prairieland Energy, Inc. (PEI) Board of Directors approved a PEI-specific derivatives use policy at their October 20, 2014 meeting (The PEI Policy). The PEI Policy is similar to the University policy, but also provides requirements for physical delivery transactions (which apply to the PEI forward purchase contracts). This report provides information on the University's financial position and potential obligations should there be an early termination of any or all of its existing financial and physical derivative transactions, including positions held by PEI. <u>This is a snapshot of counterparty exposure</u>, only as it relates to derivatives.

Counterparty Financial Health

The Policy requires regular due diligence reviews of the financial strength of University/PEI counterparties. It is the responsibility of the departments that originate each hedging transaction to review the related counterparties regularly in compliance with §12 of the Policy.

Bond credit ratings are used as a proxy for counterparty financial strength. The Policy requires an A-/A3 rating to qualify as a counterparty. The financial institutions JPMorgan Chase Bank and Morgan Stanley meet this requirement. Morgan Stanley however, does have a split rating of BBB+/A3. Deutsche Bank (credit support provider for Loop Financial Products) at BBB+/Baa2 does not meet The Policy requirement. Deutsche Bank was down rated by Moody's on May 23 from Baa1 to Baa2, an action which triggered an Additional Termination Event. The Capital Financing team is considering the University's options. The Capital Financing office should continue to monitor the financial condition and outlook of their counterparties.

The PEI Policy requires an A-/A3 rating to qualify for OTC financial transactions and a BBB-/Baa3 or BB+/Ba1 with LOC for physical delivery transactions. The energy companies all meet the PEI Policy qualifying credit rating for physical delivery transactions. TransAlta however has a split rating of BBB-/Ba1. FC Stone is not rated, but the futures transaction is an exchange traded derivative with InterContinental Exchange (ICE), therefore, per the PEI Policy, the use of a nationally recognized exchange is sufficient to demonstrate the counterparty's qualifications. ICE is rated A/A2. PEI should continue to monitor the financial condition and outlook of their counterparties.

University Total NTE

The combined current notional value of these derivative agreements is \$195.42 million. Should there be <u>immediate</u> termination of all agreements, the combined NTE for all outstanding agreements is a negative \$18.28 million, unfavorable to the University. The liability is mainly due to the MTM on the interest rate swaps, which is in line with the current market environment. The overall immediate risk of termination is low since the counterparties have no ability to terminate these transactions unilaterally unless certain triggers are met (see Financial Hedging NTE - Interest Rate Swaps).

Financial Hedging NTE (Interest Rate Swaps)

The July 31, 2016 aggregate mark-to-market value or total NTE of all interest rate swaps is a negative \$18.77 million, which would be a liability of the University to each of the swap counterparties if the swaps were terminated. This is a result of the current market environment. The immediate risk of all swaps terminating is low since the counterparties cannot unilaterally terminate these contracts unless certain triggers are met, including: (i) a University default, or (ii) the long-term rating on the University's bonds is withdrawn, suspended or reduced below BBB+/Baa1 on the COPs 2004 and UIC SC 2008 and reduced below BBB/Baa2 on the HSFS 2008 bonds.

The COPs 2004 continue to reprice well above the index as the source of repayment is noted as state appropriations and other legally available non appropriated funds. The Capital Financing team is moving forward with a fixed-rate refunding of the COPs 2004 and termination of the related interest rate swap. Targeted closing on September 29, 2016.

On June 30, 2016 S&P downgraded the University's Certificates of Participation (COPs) and AFS bonds from AA- to A+/negative outlook, South Campus remained AA-/negative outlook, and HSFS remained A/stable. Also on June 30 Moody's downgraded HSFS from A2 to A3/negative outlook. Moody's affirmed the University's AFS and COPs at Aa3/negative, and South Campus at A1/negative outlook.

Financial Hedging NTE (Futures - Energy Commodity Transactions)

The total NTE of all PEI futures contracts is positive \$0.10 million, favorable to PEI/The University. If all of the agreements were terminated as of July 31, 2016 FC Stone would have an obligation to PEI.

Physical Hedging NTE (Forward Purchases - Energy Commodity Transactions)

The total NTE of all physical energy hedges is a positive \$0.39 million, favorable to PEI/The University. If all of the agreements were terminated as of July 31, 2016 BP and Shell would have a combined obligation to PEI of \$1.0 million and PEI would have an obligation of \$0.61 million to Exelon.

Counterparty Concentration

Morgan Stanley, with a total notional value of \$113.89 million, exceeds the 50% Policy limit with 58% of the \$195.42 million current notional total. The University has two interest rate swaps with this counterparty; both predate The Policy and are coincident with related bond issues. Future use of Morgan Stanley as a hedging counterparty would require approval by the VP/CFO as an exception to The Policy.

Material Events¹

Margin exposure with INTL FC Stone equaled \$93,370. New natural gas hedges totaled \$1.25 million.

The contract with Sequent expired 6/30/16, however, gas hedge orders for Urbana were inadvertently placed outside of the contract period through FY17. The FY17 hedge orders were unwound at a total cost to UIUC of \$244,780. The buy back settlement will be paid monthly to Sequent until the total cost has been satisfied.

S&P downgraded Shell Energy N.A. from A to A- on 7/13/16 following the rating action on Royal Dutch Shell on 7/12/16 from A+ to A.

Summary of Collateral Posted by the University (Thresholds)

With respect to the University, the threshold requirement in all of the interest rate swap agreements is infinite, which means the University is never required to post collateral. Threshold requirements are not addressed in the energy forward purchases contracts, except for Shell and TransAlta which are \$10 million each, the same as the University guarantee. Margin exposure with INTL F Stone Financial is \$93,370.

The University does provide guaranty agreements to PEI's energy commodity vendors including \$12.5 million with Sequent, \$10 million each with Shell, TransAlta, and BP Canada Energy Marketing Corp., and \$5 million with Exelon. The University also provided a \$2 million guarantee to PJM Interconnection for physical procurement at UIC and a \$1 million guarantee to MISO for physical procurement at UIUC but both are unrelated to physical or financial hedging.

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Summary of Collateral Held by the University (Thresholds)

The collateral requirements for counterparties on the interest rate swaps are more risk tolerant than The Policy (see table below). All of the swap agreements were approved by the Board of Trustees and executed prior to The Policy, so this is noted as a predated-exception on the Dashboard report.

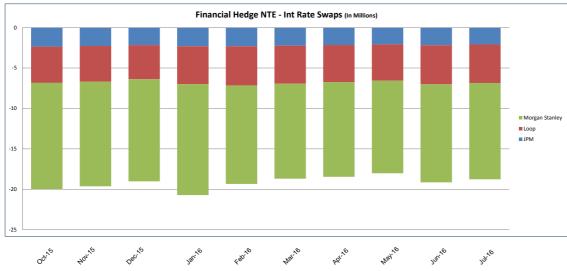
The contracts with Sequent, Exelon, and BP do not address collateral thresholds with bond rating triggers. Sequent, Exelon, and BP provide recourse through Credit or Adequate Assurances provisions if reasonable grounds exist regarding unsatisfactory creditworthiness or performance. It is incumbent upon PEI to request Performance Assurance if a rating change triggers the Policy collateral requirements. This provision allows PEI to be proactive, and not necessarily wait for a downgrade event before requesting Performance Assurance. The Shell and TransAlta contracts provide bond rating triggered collateral thresholds in line with The PEI Policy, however, not to exceed the parental company guarantee.

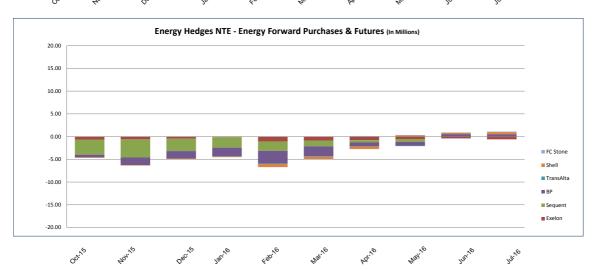
	The Policy	The PEI Policy	I	Interest Rate Swaps				
Counterparty Credit Rating S&P / Moody's	Rating Net of Collateral			Counterparty Credit Rating S&P / Moody's	Maximum NTE - Net of Collateral			
AAA / Aja Category	\$35 million	\$35 million						
AA / Aa Category	\$30 million	\$30 million		A / A2 and above	Infinite			
A / A Category	\$20 million	\$20 million		A- / A3	\$10 million			
BBB+ / Baa1 or Below	\$0 million	NA		BBB+ / Baa1 or Below	\$0 million			
///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////						
BBB/Baa Category		\$10 million						
BB+/Ba1 or Below		\$0 million						

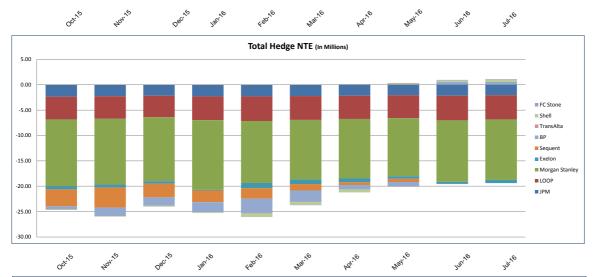
¹Items reflected in the Material Events section relate to the Policy requirements and may not conform to material events for financial reporting.

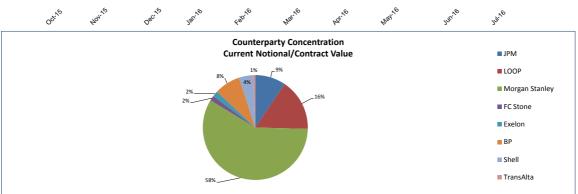
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Hedging Position Dashboard









	Responsible		Rated Entity/	Bond Rating (S&P /	Designation Trans		Underlying		Contract	Current Notional / Contract	Market Value	*MTM or NTE	Univ Guarantee Limit	Counterpart
Org	Unit al Hedges	Counterparty	Exchange	Moody's)	Derivative Type	Expires	Asset / Liability	(in N	Aillions)	(in Millions)	(in Millions)	(in Mill)	(in Mill)	Threshold
	ate Swaps):		Qual	ifying Rating A-	/ A3									
Jniversity	Capital Financing	Morgan Stanley Capital Services, Inc.	Morgan Stanley	BBB+ / A3	Int Rate Swap	8/15/2021	COPs 2004	\$	143.67	95.03		(9.79)		Predated Exception
	Capital	Morgan Stanley Capital												Predated
University	Financing	Services, Inc.	Morgan Stanley	BBB+ / A3	Int Rate Swap	1/15/2022	UIC SC 2008 SUBTOTAL MS	\$ \$	27.40 171.07	18.86 113.89		(2.13) (11.92)		Exception
University	Capital Financing	JP Morgan Chase Bank, N.A.	JP Morgan Chase Bank, N.A.	A+ / Aa3	Int Rate Swap	1/15/2022	UIC SC 2008	\$	26.85	18.50		(2.08)		Predated Exception
University	Capital Financing	Loop Financial Products, I, LLC	Deutsche Bank AG (CSP)	BBB + / Baa2	Int Rate Swap	10/1/2026	HSFS 2008	\$	40.88	31.17		(4.76)		Predated Exception
ŕ							UBTOTAL SWAPS	\$	238.80	163.56		(18.77)		
PEI Futur	es Contracts)	:												
PEI	Utilities Admin	INTL FCStone Financial Inc.	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2018	Nat Gas Mult FY2018	\$	0.95	0.95	1.03	0.08		
PEI	Utilities Admin	INTL FCStone Financial Inc.	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2019	Nat Gas Mult FY2019	\$	2.08	2.08	2.10	0.02		
							UBTOTAL Futures	\$	3.03	3.03	3.13	0.10		
							TOTAL FINANCIAL		241.83	166.59	3.13	(18.67)		
Physica	I Hedges		Q	ualifying Rating			-							
(PEI Energ	gy Forward Pu			3 or BB+/Ba1 wi	th LOC									
	Utilities	BP Canada Energy Marketing	BP Corporation North America,		Forward		Natural Gas							
PEI	Admin	Corp. BP Canada	Inc. (PCG)	A- / A3	Purchase	6/30/2017	Mult FY17	\$	11.24	10.30				
	Utilities	Energy Marketing	BP Corporation North America,		Forward		Natural Gas							
PEI	Admin	Corp.	Inc. (PCG)	A- / A3	Purchase	6/30/2018	Mult FY18	\$	5.25	5.25				
							SUBTOTAL BP	\$	16.49	15.55	16.09	0.54	10.00	Adequate Assurance
		Exelon												Assurance
PEI	Utilities Admin	Generation	Exelon Generation Company LLC	BBB / Baa2	Forward Purchase	6/30/2016	Electricity Mult FY16	\$	-	0.00				
		Exelon												
PEI	Utilities Admin	Generation Company LLC Exelon	Exelon Generation Company LLC	BBB / Baa2	Forward Purchase	6/30/2017	Electricity Mult FY17	\$	2.64	2.31				
PEI	Utilities Admin	Generation Company LLC	Exelon Generation	BBB / Baa2	Forward Purchase	6/30/2018	Electricity Mult FY18	\$	0.66	0.66				
	Utilities	Exelon Generation	Exelon Generation		Forward		Electricity Mult							
PEI	Admin	Company LLC		BBB / Baa2	Purchase	6/30/2019	FY19 SUBTOTAL Exelon	\$	0.44	0.44	0.00	(0.04)	5.00	Coo dit
		TransAlta					SUBTUTAL Exelon	Þ	3.74	3.41	2.80	(0.61)	5.00	Credit Assurance
		Energy												
PEI	Utilities Admin	Marketing (US) Inc.	TransAlta Corp (PCG)	BBB- / Ba1	Forward Purchase	6/30/2016	Electricity Mult FY16	\$	-	0.00				
		TransAlta Energy												
PEI	Utilities Admin	Marketing (US) Inc.	TransAlta Corp (PCG)	BBB-/Ba1	Forward Purchase	6/30/2017	Electricity Mult FY17	\$	0.05	0.05				
		TransAlta Energy												
PEI	Utilities Admin	Inc.	TransAlta Corp (PCG)	BBB- / Ba1	Forward Purchase	6/30/2018	Electricity Mult FY18	\$	0.99	0.99				
		TransAlta Energy												
PEI	Utilities Admin	Marketing (US) Inc.	TransAlta Corp (PCG)	BBB- / Ba1	Forward Purchase	6/30/2019	Electricity Mult FY19	¢	0.41	0.41				
- 21	Admin	inc.	(FCG)	BBB- / Bal	Fulchase		TOTAL TransAlta	\$	1.45	1.45	1.45	0.00	10.00	Rating Triggers
		Shell Energy												nggeis
PEI	Utilities Admin	North America (US), L.P.	Shell Energy North America (US), L.P.	A- / A3	Forward Purchase	6/30/2016	Electricity Mult FY16	\$		0.00				
	Utilities	Shell Energy	Shell Energy North		Forward		Electricity Mult							
PEI	Admin	(US), L.P. Shell Energy	America (US), L.P.	A- / A3	Purchase	6/30/2017	FY17	\$	3.89	3.46				
PEI	Utilities Admin	North America (US), L.P.	Shell Energy North America (US), L.P.	A- / A3	Forward Purchase	6/30/2018	Electricity Mult FY18	\$	3.89	3.89				
PEI	Utilities Admin	Shell Energy North America (US), L.P.	Shell Energy North America (US), L.P.	A- / A2	Forward	6/30/2019	Electricity Mult	\$	1.00	1.06				
-		Shell Energy		A- / A3	Purchase	0/30/2019	FY19	φ	1.06	1.06				
	Utilities	North America (US), L.P.	Shell Energy North America (US), L.P.	A- / A3	Forward Purchase	6/30/2020	Electricity Mult FY20	\$	0.01	0.01				
PEI	Admin	(00), =												
PEI	Admin	(SUBTOTAL Shell		8.85	8.42	8.88	0.46		
PEI	Admin	(),				SUBT		\$		8.42 28.83 195.42	8.88 29.22 32.35	0.46		

*Negative termination value means the University or PEI is obligated to the counterparty (transaction is "underwater").

CSP - Credit Support Provider LOC - Letter of Credit provided PCG - Parental Company Guarantee provided WR - Withdrawn Rating