Reported to the Board of Trustees January 19, 2017



Derivatives Use Report

- Summary
- Dashboard

November 30, 2016

Prepared By Enterprise Risk Management

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. This is a snapshot of counterparty exposure, 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. Deutsch Bank has been fined \$14 billion by the Department of Justice for selling mortgage-backed securities. The University will investigate transferring the interest rate swap to a stronger counterparty. 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. Rail Splitter is not rated and therefore provided a \$2.5 million LOC from Comerica Bank. 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 \$103.78 million. Should there be <u>immediate</u> termination of all agreements, the combined NTE for all outstanding agreements is a negative \$8.0 million, unfavorable to the University. The liability is mainly due to the MTM on the interest rate swaps. 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 November 30, 2016 aggregate mark-to-market value or total NTE of all interest rate swaps is a negative \$6.93 million, which would be a liability of the University to each of the swap counterparties if the swaps were terminated. 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 UIC SC 2008 and reduced below BBB/Baa2 on the HSFS 2008 bonds.

There has been no change to the University's ratings. With the downgrade of the State of Illinois GO bonds to BBB/Negative outlook by Standard & Poor's on 9/30/16, Capital Financing anticipates a downgrade of the University's AFS, COPs, and South Campus bonds from A+ to A.

Hedging Summary

All University bond ratings and the State of Illinois are listed below.

System	Moody's	Outlook	S&P	Outlook
AFS	Aa3	Negative	A+	Negative
COPs	Aa3	Negative	A+	Negative
UIC South Campus	A1	Negative	A+	Negative
HSFS	A3	Negative	А	Stable
State of IL GO	Baa2	Negative	BBB	Negative

Financial Hedging NTE (Futures - Energy Commodity Transactions)

The total NTE of all PEI futures contracts is positive \$0.06 million, favorable to PEI/The University. If all of the agreements were terminated as of November 30, 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 negative \$1.13 million, unfavorable to PEI/The University. If all of the agreements were terminated as of November 30, 2016 BP, TransAlta, and Shell would have a combined obligation to PEI of \$1.38 million and PEI would have a an obligation of \$0.43 million to Exelon and \$2.08 million to Rail Splitter.

Counterparty Concentration

Since the COPs 2004 coincident swap was terminated with the COPs refunding, concentration with Morgan Stanley no longer exceeds The Policy 50% limit. Current notional/contract values with all counterparties are below The Policy limit.

Material Events¹

UIC purchased 390,000 MMBtu's of natural gas hedges totaling \$1,162,200 with BP. None reported by Capital Financing.

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 FC Stone Financial is \$75,278.

The University does provide guaranty agreements to PEI's energy commodity vendors including \$10 million each with Shell, TransAlta, and BP Canada Energy Marketing Corp., \$5 million with Exelon, and \$2.5 million to Rail Splitter. 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.

Summary of Collateral Held by the University (Thresholds)

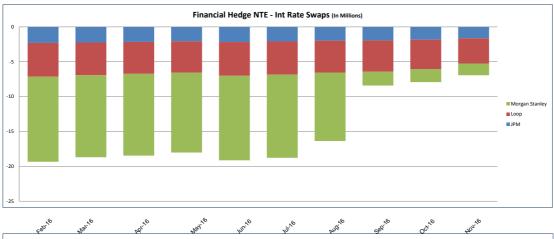
The collateral requirements for counterparties on the interest rate swaps are more risk tolerant than The Policy (see table below). All of the swap agreements were approved by the Board of Trustees and executed prior to The Policy, so this is noted as a predated-exception on the Dashboard report.

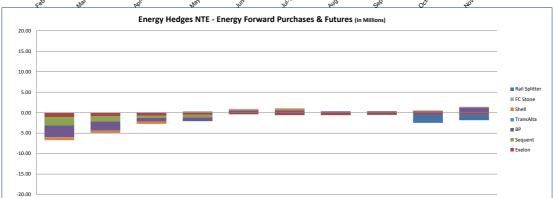
The contracts with Exelon, BP, and Rail Splitter do not address collateral thresholds with bond rating triggers. Exelon and BP provide recourse through Credit or Adequate Assurances provisions if reasonable grounds exist regarding unsatisfactory creditworthiness or performance. It is incumbent upon PEI 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.

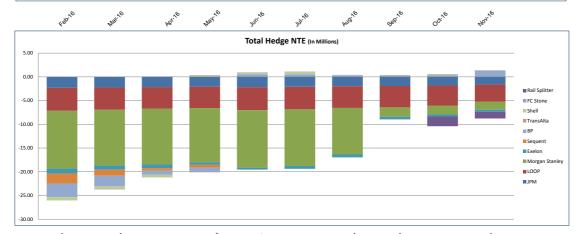
Conactar Requirements of Counterparties / Thresholds									
The Policy The PEI Policy				Interest Rate Swaps					
Counterparty Credit Rating S&P / Moody's	Maximum NTE - Net of Collateral FINANCIAL	Maximum NTE - Net of Collateral PHYSICAL		Counterparty Credit Rating S&P / Moody's	Maximum NTE - Net of Collateral				
AAA / Aaa 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							

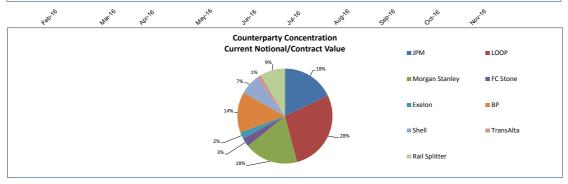
Collateral Requirements of Counterparties / Thresholds

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









	Rated Entity/	Bond Rating			Underlying		ontract	Current Notional / Contract	Market Value	*MTM or NTE	Univ Guarantee Limit	Counterpart
Counterparty	Exchange	(S&P / Moody's)	Derivative Type	Expires	Asset / Liability	(in Mi	illions)	(in Millions)	(in Millions)	(in Mill)	(in Mill)	Threshol
	Qua	lifying Rating A- /	A 3									
rgan Stanley	444	in ying ruung it i										
pital Services,	Morgan Stanley	BBB+/A3	Int Rate Swap	1/15/2022	UIC SC 2008	s	27.40	18.86		(1.68)		Predate Exception
Morgan Chase		BBB+/A3	Int Kate Swap	1/13/2022	010 30 2008	ę	27.40	10.00		(1.00)		Predate
nk, N.A.	Bank, N.A.	A+ / Aa3	Int Rate Swap	1/15/2022	UIC SC 2008	\$	26.85	18.50		(1.64)		Exception
op Financial oducts, I, LLC	Deutsche Bank AG (CSP)	BBB+ / Baa2	Int Rate Swap	10/1/2026	HSFS 2008	s	40.88	28.83		(3.62)		Predate Exceptio
				:	SUBTOTAL SWAPS	\$	95.13	66.19		(6.93)		
			_									
L FCStone ancial Inc.	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2018	Nat Gas Mult FY2018	s	0.95	0.95	1.06	0.11		
L FCStone	InterContinental	A/ A2	Futures	0/30/2018	Nat Gas Mult	ş	0.55	0.55	1.00	0.11		
ancial Inc.	Exchange (ICE)	A / A2	Contract	6/30/2019	FY2019	\$	2.08	2.08	2.03	(0.05)		
					SUBTOTAL Futures		3.03 98.16	3.03 69.22	3.09 3.09	0.06 (6.87)		
				305	TOTAL FINANCIAL	ş	50.10	05.22	3.05	(0.07)		
ses):		ualifying Rating 3 or BB+/Ba1 with	LOC									
	BP Corporation											
		A- / A3	Forward Purchase	6/20/2017	Natural Gas	e	11 79	7.07				
rketing Corp.	Inc. (PCG) BP Corporation	A- / A3	Purchase	6/30/2017	Mult FY17	\$	11.78	7.07				
	y North America,		Forward		Natural Gas							
rketing Corp.	Inc. (PCG)	A- / A3	Purchase	6/30/2018	Mult FY18 SUBTOTAL BP	\$ \$	7.12 18.90	7.12	15.43	1.24	10.00	Adequat
					SUBTUTAL BP	\$	10.90	14.19	15.43	1.24	10.00	Adequate
elon Generation			Forward		Electricity Mult							
mpany LLC elon Generation	Company LLC Exelon Generation	BBB / Baa2	Purchase Forward	6/30/2017	FY17 Electricity Mult	\$	2.64	1.25				
mpany LLC	Company LLC	BBB / Baa2	Purchase	6/30/2018	FY18	\$	0.66	0.66				
elon Generation	Exelon Generation		Forward		Electricity Mult							
mpany LLC	Company LLC	BBB / Baa2	Purchase	6/30/2019	FY19 SUBTOTAL Exelon	\$	0.44 3.74	0.44 2.35	1.92	(0.43)	5.00	Credit
					SOBIOTAL EXCIDIT	\$	3.74	2.35	1.52	(0.43)	5.00	Assuranc
ansAlta Energy rketing (US) Inc.		BBB- / Ba1	Forward Purchase	6/30/2017	Electricity Mult FY17	\$	0.05	0.05				
intoting (00) into.	. (100)	000 / 001	T dronado	0/00/2011		Ŭ.	0.00	0.00				
	TransAlta Corp		Forward		Electricity Mult							
rketing (US) Inc.	c. (PCG)	BBB- / Ba1	Purchase	6/30/2018	FY18	\$	0.99	0.99				
ansAlta Energy	TransAlta Corp		Forward		Electricity Mult							
rketing (US) Inc.	c. (PCG)	BBB- / Ba1	Purchase	6/30/2019	FY19	\$	0.41	0.41				5.4
				50	BTOTAL TransAlta	\$	1.45	1.45	1.46	0.01	10.00	Rating Triggers
												inggoio
	h Shell Energy North		Forward		Electricity Mult							
nerica (US), L.P.	P. America (US), L.P.	A- / A3	Purchase	6/30/2017	FY17	\$	3.89	2.10				
ell Energy North	h Shell Energy North		Forward		Electricity Mult							
nerica (US), L.P.	P. America (US), L.P.	A- / A3	Purchase	6/30/2018	FY18	\$	3.89	3.89				
ell Energy North	h Shell Energy North		Forward		Electricity Mult							
	P. America (US), L.P.	A- / A3	Purchase	6/30/2019	FY19	\$	1.06	1.06				
	h Shell Energy North P. America (US), L.P.	A- / A3	Forward Purchase	6/30/2020	Electricity Mult FY20	s	0.01	0.01				
101100 (000), 2.1 .	. / monou (00), 2.1 .	11 110	1 dronado	0/00/2020	SUBTOTAL Shell	\$	8.85	7.06	7.19	0.13	10.00	Rating
												Triggers
il Splitter Wind	Comerica Bank		Forward		Electricity Mult							
rm LLC	(LOC)	A- / A3	Purchase	6/30/2017	FY17	\$	0.76					
il Splitter Wind			Forward		Electricity Mult							
rm LLC il Splitter Wind	(LOC)	A- / A3	Purchase	6/30/2018	FY18	\$	0.96	0.96				
rm LLC	Comerica Bank (LOC)	A- / A3	Forward Purchase	6/30/2019	Electricity Mult FY19	s	0.96	0.96				
il Splitter Wind			Forward	0.00/2013	Electricity Mult	÷	0.00	0.50				
rm LLC	(LOC)	A- / A3	Purchase	6/30/2020	FY20	\$	0.96	0.96				
il Splitter Wind	Comerica Bank		Forward		Electricity Mult							
rm LLC	(LOC)	A- / A3	Purchase	6/30/2021	FY21	\$	0.96	0.96				
il Splitter Wind			Forward	0.000	Electricity Mult		0.00					
rm LLC il Splitter Wind	(LOC)	A- / A3	Purchase	6/30/2022	FY22	\$	0.96	0.96				
rm LLC	Comerica Bank (LOC)	A- / A3	Forward Purchase	6/30/2023	Electricity Mult FY23	s	0.96	0.96				
il Splitter Wind			Forward		Electricity Mult	Ť	2.00	0.00				
rm LLC	(LOC)	A- / A3	Purchase	6/30/2024	FY24	\$	0.96	0.96				
il Splitter Wind rm LLC	Comenca Dank		Forward		Electricity Mult							
	(LOC)	A- / A3	Purchase	6/30/2025	FY25	\$	0.96	0.96				
il Splitter Wind		A / A2	Forward	0000000	Electricity Mult	e	0.00	0.00				
rm LLC il Splitter Wind	(LOC)	A- / A3	Purchase	6/30/2026	FY26	\$	0.96	0.96				
rm LLC	Comerica Bank (LOC)	A- / A3	Forward Purchase	6/30/2027	Electricity Mult FY27	\$	0.20	0.20				
									7 43	(1 41)	2 50	LOC
				SUB	TOTAL PHYSICALS	s					2.50	200
					-							
				GRAND TOTA	L	\$	140.70	103.11	36.52	(7.33)		
		e University or PEI is obligated nderwater").	e University or PEI is obligated	e University or PEI is obligated	SUBT SUB GRAND TOTA a University or PEI is obligated CSP - Credit St	SUBTOTAL Renewables SUBTOTAL PHYSICALS GRAND TOTAL e University or PEI is obligated CSP - Credit Support Provider	SUBTOTAL Renewables \$ SUBTOTAL PHYSICALS \$ GRAND TOTAL \$ University or PEI is obligated CSP - Credit Support Provider	SUBTOTAL Renewables \$ 9.60 SUBTOTAL PHYSICALS \$ 42.54 GRAND TOTAL \$ 140.70 e University or PEI is obligated CSP - Credit Support Provider	SUBTOTAL Renewables \$ 9.60 8.84 SUBTOTAL PHYSICALS \$ 42.54 33.89 GRAND TOTAL \$ 140.70 103.11 e University or PEI is obligated CSP - Credit Support Provider PCG - Parental C	SUBTOTAL Renewables 9.60 8.84 7.43 SUBTOTAL PHYSICALS \$ 42.54 33.89 33.43 GRAND TOTAL \$ 140.70 103.11 36.52 e University or PEI is obligated CSP - Credit Support Provider PCG - Parental Company Guarantee	SUBTOTAL Renewables \$ 9.60 8.84 7.43 (1.41) SUBTOTAL PHYSICALS \$ 42.54 33.89 33.43 (0.46) GRAND TOTAL \$ 140.70 103.11 36.52 (7.33) a University or PEI is obligated CSP - Credit Support Provider PCG - Parental Company Guarantee provided	SUBTOTAL Renewables \$ 9.60 8.84 7.43 (1.41) 2.50 SUBTOTAL SUBTOTAL \$ 42.54 33.89 33.43 (0.46) GRAND TOTAL \$ 140.70 103.11 36.52 (7.3) e University or PEI is obligated CSP - Credit Support Provider PCG - Parental Company Guarantee provided