Derivatives Use Report

- Summary
- Dashboard

March 31, 2017

Prepared By Enterprise Risk Management

Hedging Summary

Introduction

As determined by the University of Illinois System (the System) Derivatives Use Policy (The Policy) which was approved by the Board of Trustees in July 2010 and updated November 2014, the System'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 System policy, but also provides requirements for physical delivery transactions (which apply to the PEI forward purchase contracts). This report provides information on the System'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 System/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, Morgan Stanley, and Deutsche Bank (credit support provider for Loop Financial Products) all meet this requirement. Deutsche Bank was upgraded on March 28, 2017 by S&P to A- from BBB+. Morgan Stanley and Deutsche Bank however, do have split ratings of BBB+/A3 and A-/Baa2 respectively. 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 which is rated A-/A3. 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.

System Total NTE

The combined current notional value of these derivative agreements is \$94.61 million. Should there be <u>immediate</u> termination of all agreements, the combined NTE for all outstanding agreements is a negative \$7.14 million, unfavorable to the System. 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 aggregate mark-to-market value or total NTE of all interest rate swaps is a negative \$5.89 million, which would be a liability of the System 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 of Illinois System default, or (ii) the long-term rating on the System'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.

The *Bond Buyer* reports on market participant's concerns that the State of Illinois will be downgraded to junk status if the fiscal impasse continues. There has been no change to the University of Illinois System's ratings, however the possibility of downgrades exists due to the Illinois fiscal impasse.

Hedging Summary

All University of Illinois System 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	A	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 \$0.10 million, favorable to PEI/the System. If all of the agreements were terminated 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 \$1.35 million, unfavorable to PEI/the System. If all of the agreements were terminated TransAlta, Shell, and BP would have obligations to PEI of \$0.05 million, \$0.16 million, and \$0.59 million respectively. PEI would have a an obligation of \$0.03 to EDF, \$0.45 million to Exelon, and \$1.67 million to Rail Splitter.

Counterparty Concentration

Current notional/contract values with all counterparties are below The Policy limit.

Material Events¹

Deutsche Bank (credit support provider for Loop Financial Products) was upgraded on March 28, 2017 by S&P to Afrom BBB+.

PEI contracted with EDF Energy Services to provide Natural Gas to UIC for the period July 1, 2018 - June 30, 2019. EDF provided a \$3 million parental guaranty to PEI. On behalf of PEI, the University System is executing a \$3 million parental guarantee to EDF.

UIC purchased natural gas hedges totaling \$2,732,880 with EDF and \$204,975 with BP.

Summary of Collateral Posted by the System (Thresholds)

With respect to the System, the threshold requirement in all of the interest rate swap agreements is infinite, which means the University of Illinois System 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 System guarantee. Margin exposure with INTL FC Stone Financial is \$94,481.

The System 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, \$2.5 million to Rail Splitter, and \$3 million to EDF. The System 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.

Hedging Summary

Summary of Collateral Held by the System (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, Rail Splitter, and EDF do not address collateral thresholds with bond rating triggers. Exelon, BP, and EDF 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. Rail Splitter has provided a \$2.5 million LOC from Comerica Bank. 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.

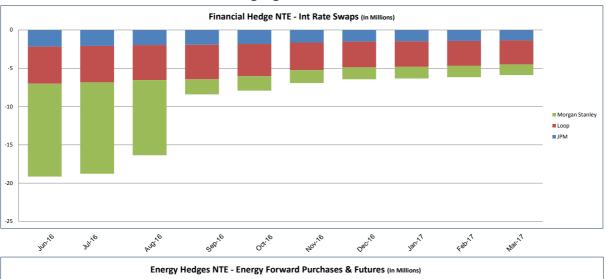
Collateral Requirements of Counterparties / Thresholds

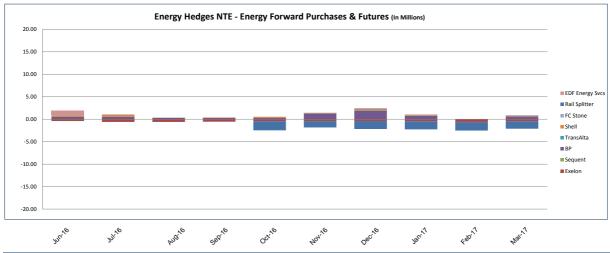
The Policy The PEI Policy							
Counterparty Credit Rating S&P / Moody's	Maximum NTE - Net of Collateral FINANCIAL	Maximum NTE - Net of Collateral PHYSICAL					
AAA / Aaa Category	\$35 million	\$35 million					
AA / Aa Category	\$30 million	\$30 million					
A / A Category	\$20 million	\$20 million					
BBB+ / Baa1 or Below	\$0 million	NA					
///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////					
BBB/Baa Category		\$10 million					
BB+/Ba1 or Below		\$0 million					

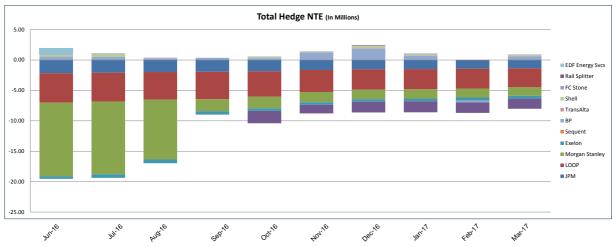
Interest Rate Swaps							
Counterparty Credit Rating S&P / Moody's	Maximum NTE - Net of Collateral						
A / A2 and above	Infinite						
A-/A3	\$10 million						
BBB+ / Baa1 or Below	\$0 million						

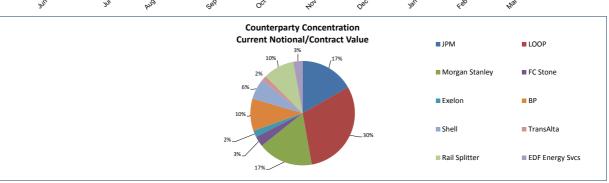
¹Items reflected in the Material Events section relate to the Policy requirements and may not conform to material events for financial reporting.

Hedging Position Dashboard









Hedging Position Dashboard

	Responsible		Rated Entity/	Bond Rating			Underlying		g Contract	Current Notional / Contract	Market Value	*MTM or NTE	System Guarantee Limit	Counterpart
Org	Unit	Counterparty	Exchange	(S&P / Moody's)	Derivative Type	Expires	Asset / Liability		Millions)	(in Millions)	(in Millions)	(in Mill)	(in Mill)	Threshold
	al Hedges													
Interest F	Rate Swaps):	Morgan Stanley	Qual	ifying Rating A- /	A3									
	Capital	Capital Services,												Predated
ystem	Financing	Inc.	Morgan Stanley	BBB+ / A3	Int Rate Swap	1/15/2022	UIC SC 2008	\$	27.40	16.16		(1.40)		Exception
System	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	15.83		(1.36)		Predated Exception
ystem	Capital	Loop Financial	Deutsche Bank AG	AT / AdJ	III Nate Swap	1/13/2022	010 30 2000	Ψ	20.00	13.03		(1.30)		Predated
System	Financing	Products, I, LLC	(CSP)	A- / Baa2	Int Rate Swap	10/1/2026	HSFS 2008	\$	40.88	28.83		(3.13)		Exception
						S	UBTOTAL SWAPS	\$	95.13	60.82		(5.89)		
PEI Futur	res Contracts): Utilities	INTL FCStone	InterContinental		Futures		Nat Gas Mult							
PEI	Admin	Financial Inc.	Exchange (ICE)	A / A2	Contract	6/30/2018	FY2018	\$	0.95	0.95	1.08	0.13		
	Utilities	INTL FCStone	InterContinental		Futures		Nat Gas Mult							
EI	Admin	Financial Inc.	Exchange (ICE)	A / A2	Contract	6/30/2019	FY2019	\$	2.08	2.08	2.05	(0.03)		
							UBTOTAL Futures TOTAL FINANCIAL		3.03 98.16	3.03 63.85	3.13	0.10 (5.79)		
hvsica	l Hedges		0	116 do D11		3061	TOTAL FINANCIAL	Ψ	30.10	03.03		(3.73)		
-	gy Forward Pu	rchases):		ualifying Rating 3 or BB+/Ba1 with	LOC									
	9,		BP Corporation											
	Utilities				Forward		Natural Gas							
PEI	Admin	Marketing Corp.	Inc. (PCG) BP Corporation	A- / A3	Purchase	6/30/2017	Mult FY17	\$	11.78	2.14				
	Utilities	BP Canada Energy			Forward		Natural Gas							
PEI	Admin	Marketing Corp.	Inc. (PCG)	A- / A3	Purchase	6/30/2018	Mult FY18	\$	7.32	7.32				
							SUBTOTAL BP	\$	19.10	9.46	10.05	0.59	10.00	Adequate Assurance
	Utilities	EDF Energy	EDF Trading				Nat Gas Mult							Assurance
PEI	Admin	Services, LLC	Limited	NR	Baa2	6/30/2019	FY2019	\$	2.73	2.73	2.70	(0.03)	3.00	Assurance
PΕΙ	Utilities Admin	Exelon Generation Company LLC	Exelon Generation Company LLC	BBB / Baa2	Forward Purchase	6/30/2017	Electricity Mult FY17	\$	2.64	0.80				
-1	Utilities	Exelon Generation	Exelon Generation	DDD / DddZ	Forward	0/30/2017	Electricity Mult	Ψ	2.04	0.00				
EI	Admin	Company LLC	Company LLC	BBB / Baa2	Purchase	6/30/2018	FY18	\$	0.66	0.66				
)	Utilities		Exelon Generation	DDD / Dago	Forward	0/20/2040	Electricity Mult	•	0.44	0.44				
PΕΙ	Admin	Company LLC	Company LLC	BBB / Baa2	Purchase	6/30/2019	FY19 SUBTOTAL Exelon	\$	0.44 3.74	0.44 1.90	1.45	(0.45)	5.00	Credit
								•				(0.10)	0.00	Assurance
EI	Utilities Admin	TransAlta Energy Marketing (US) Inc.	TransAlta Corp	BBB- / Ba1	Forward Purchase	6/30/2017	Electricity Mult FY17	\$	0.05	0.05				
EI	Aumin	warketing (03) inc.	(FCG)	DDD-/Dai	Fulcilase	6/30/2017	FT1/	Ф	0.05	0.03				
	Utilities	TransAlta Energy			Forward		Electricity Mult							
PEI	Admin	Marketing (US) Inc.	(PCG)	BBB- / Ba1	Purchase	6/30/2018	FY18	\$	0.99	0.99				
	Utilities	TransAlta Energy	TransAlta Corn		Forward		Electricity Mult							
PEI	Admin	Marketing (US) Inc.		BBB- / Ba1	Purchase	6/30/2019	FY19	\$	0.41	0.41				
						SUB	STOTAL TransAlta	\$	1.45	1.45	1.50	0.05	10.00	Rating
														Triggers
	Utilities	Shell Energy North	Shell Energy North		Forward		Electricity Mult							
PEI	Admin		America (US), L.P.	A- / A3	Purchase	6/30/2017	FY17	\$	3.89	1.15				
	Utilities	Chall Fasser, North	Shell Energy North		Forward		Electricity Marit							
PEI	Admin		America (US), L.P.	A- / A3	Purchase	6/30/2018	Electricity Mult FY18	\$	3.89	3.89				
		(,,	(0 0),					*						
	Utilities		Shell Energy North		Forward		Electricity Mult							
PΕΙ	Admin	America (US), L.P.	America (US), L.P.	A- / A3	Purchase	6/30/2019	FY19	\$	1.06	1.06				
	Utilities	Shell Energy North	Shell Energy North		Forward		Electricity Mult							
PEI	Admin		America (US), L.P.	A- / A3	Purchase	6/30/2020	FY20	\$	0.01	0.01				
							SUBTOTAL Shell	\$	8.85	6.11	6.27	0.16	10.00	Rating
														Triggers
PEI Rene		Doil College 147												
ıcı.	Utilities	Rail Splitter Wind Farm LLC	Comerica Bank	A /A2	Forward	6/20/2047	Electricity Mult	¢	0.70	0.07				
EI	Admin		(LOC)	A- / A3	Purchase	6/30/2017	FY17	\$	0.76	0.27				
ΈI	Utilities Admin	Rail Splitter Wind Farm LLC	Comerica Bank (LOC)	A- / A3	Forward Purchase	6/30/2018	Electricity Mult FY18	\$	0.96	0.96				
-1	Utilities	Rail Splitter Wind	Comerica Bank	n-1 no	Forward	0/30/2010	Electricity Mult	Ψ	0.90	0.90				
EI	Admin	Farm LLC	(LOC)	A- / A3	Purchase	6/30/2019	FY19	\$	0.96	0.96				
	Utilities	Rail Splitter Wind	Comerica Bank		Forward		Electricity Mult							
EI	Admin	Farm LLC	(LOC)	A- / A3	Purchase	6/30/2020	FY20	\$	0.96	0.96				
	Utilities	Rail Splitter Wind	Comerica Bank		Forward		Electricity Mult							
	Admin	Farm LLC	(LOC)	A- / A3	Purchase	6/30/2021	FY21	\$	0.96	0.96				
EI	Utilities	Rail Splitter Wind	Comerica Bank	A / A=	Forward	0/00/0000	Electricity Mult	•	0.00					
		Farm LLC Rail Splitter Wind	(LOC)	A- / A3	Purchase	6/30/2022	FY22	\$	0.96	0.96				
EI	Admin		Comerica Bank	A- / A3	Forward Purchase	6/30/2023	Electricity Mult FY23	\$	0.96	0.96				
EI	Utilities	Farm LLC	(LOC)	, ,	Forward	J. 30, 2020	Electricity Mult	-	5.50	0.50				
EI	Utilities Admin	Farm LLC	(LOC) Comerica Bank					\$	0.96	0.96				
EI	Utilities	Farm LLC Rail Splitter Wind Farm LLC	(LOC) Comerica Bank (LOC)	A- / A3	Purchase	6/30/2024	FY24			0.50				
	Utilities Admin Utilities Admin	Farm LLC Rail Splitter Wind Farm LLC Rail Splitter Wind	Comerica Bank (LOC)	A- / A3	Purchase	6/30/2024			0.00	0.50				
EI	Utilities Admin Utilities	Farm LLC Rail Splitter Wind Farm LLC	Comerica Bank	A- / A3 A- / A3		6/30/2024	Electricity Mult FY25	\$	0.96	0.96				
EI EI EI	Utilities Admin Utilities Admin Utilities Admin Utilities	Farm LLC Rail Splitter Wind Farm LLC Rail Splitter Wind Farm LLC Rail Splitter Wind	Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank	A- / A3	Purchase Forward Purchase Forward	6/30/2025	Electricity Mult FY25 Electricity Mult		0.96	0.96				
EI EI	Utilities Admin Utilities Admin Utilities Admin Utilities Admin	Farm LLC Rail Splitter Wind Farm LLC Rail Splitter Wind Farm LLC Rail Splitter Wind Farm LLC	Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC)		Purchase Forward Purchase Forward Purchase		Electricity Mult FY25 Electricity Mult FY26	\$						
EI EI EI	Utilities Admin Utilities Admin Utilities Admin Utilities Admin Utilities	Farm LLC Rail Splitter Wind Farm LLC	Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC)	A- / A3	Purchase Forward Purchase Forward Purchase Forward	6/30/2025	Electricity Mult FY25 Electricity Mult FY26 Electricity Mult	\$	0.96 0.96	0.96				
EI EI EI	Utilities Admin Utilities Admin Utilities Admin Utilities Admin	Farm LLC Rail Splitter Wind Farm LLC Rail Splitter Wind Farm LLC Rail Splitter Wind Farm LLC	Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC)	A- / A3	Purchase Forward Purchase Forward Purchase	6/30/2025 6/30/2026 6/30/2027	Electricity Mult FY25 Electricity Mult FY26 Electricity Mult FY27	\$	0.96 0.96 0.20	0.96 0.96 0.20				
EI EI EI	Utilities Admin Utilities Admin Utilities Admin Utilities Admin Utilities	Farm LLC Rail Splitter Wind Farm LLC	Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC)	A- / A3	Purchase Forward Purchase Forward Purchase Forward	6/30/2025 6/30/2026 6/30/2027 SUBTO	Electricity Mult FY25 Electricity Mult FY26 Electricity Mult FY27 DTAL Renewables	\$ \$	0.96 0.96 0.20 9.60	0.96 0.96 0.20 9.11	7.44	(1.67)	2.50	LOC
EI EI EI	Utilities Admin Utilities Admin Utilities Admin Utilities Admin Utilities	Farm LLC Rail Splitter Wind Farm LLC	Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC) Comerica Bank (LOC)	A- / A3	Purchase Forward Purchase Forward Purchase Forward	6/30/2025 6/30/2026 6/30/2027 SUBTO	Electricity Mult FY25 Electricity Mult FY26 Electricity Mult FY27	\$ \$	0.96 0.96 0.20	0.96 0.96 0.20	7.44 29.41	(1.67) (1.35)	2.50	LOC

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

LOC - Letter of Credit provide

PCG - Parental Company Guarantee provided WR - Withdrawn Rating