Derivatives Use Report

- Summary
- Dashboard

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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 (S&P / Moody's) 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. Morgan Stanley and Deutsche Bank's split ratings of BBB+/A3 and A-/Baa2 respectively only meet the qualification with one rating agency. 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 HSBC Bank which is rated AA-/Aa3 (previous LOC with Comerica Bank ended). EDF is not rated by S&P but is rated Baa2 by Moody's. 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 \$86.73 million. Should there be <u>immediate</u> termination of all agreements, the combined NTE for all outstanding agreements is a negative \$6.57 million, unfavorable to the System. 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 \$4.70 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.

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

System AFS COPs	Moody's	Outlook	S&P	Outlook	
AFS	A1	Negative	A-	Stable	
COPs	A 1	Negative	A-	Stable	
UIC South Campus	A2	Negative	A-	Stable	
HSFS	Baa1	Negative	A-	Stable	
State of IL GO	Baa3	Negative	BBB-	Stable	

Financial Hedging NTE (Futures - Energy Commodity Transactions, Financially Settled)

The total NTE of all PEI futures contracts is a negative \$0.04 million, unfavorable to PEI/the System. If all of the agreements were terminated PEI would have an obligation to FC Stone.

Hedging Summary

Physical Hedging NTE (Forward Purchases - Energy Commodity Transactions, Physical Delivery)

The total NTE of all physical energy hedges is a negative \$1.83 million, unfavorable to PEI/the System. If all of the agreements were terminated PEI would have an obligation to BP, Shell, and Railsplitter of \$0.22 million, \$0.02 million, and \$1.65 million respectively. EDF Energy and TransAlta would have an obligation to PEI of \$0.03 million each. Exelon is neutral.

Counterparty Concentration

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

Material Events¹

Purchased 47,500 MMBTU's of natural gas forward contracts from BP totaling \$142,500 for FY 2018. Purchased 38,512 MWH's of electric forward contracts from Shell totaling \$1,340,400 for FY 2018-2021. Purchased 4,096 MWH's of electric forward contracts from TransAlta totaling \$130,599 for FY 2022.

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 \$117,943.

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. System guarantees with Sequent Energy Management for \$12.5 million and NRG for \$1.25 million were terminated in September 2017. 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.

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 HSBC 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 T	he 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.



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	Responsible Unit		Rated Entity/	Bond Rating	Declarative Type		Underlying Asset / Liability		Contract	current Notional / Contract (in Millions)	Market Value (in Millions)		System Guarantee Limit	Counterparty
Org Financia	al Hedges	Counterparty	Exchange	(S&P / Moody's)	Derivative Type	Expires	/ Liability	(in	Millions)	(in Millions)	Millions)	(in Mill)	(in Mill)	Threshold
(Interest R	ate Swaps):	Morgan Stanley	Qual	lifying Rating A-	/ A3									
	Capital	Capital Services,		DDD /40	1.5.0	4/45/0000		•	07.40	40.40		(4.04)		Predated
System	Financing Capital	Inc. JP Morgan Chase	Morgan Stanley JP Morgan Chase	BBB+/A3	Int Rate Swap	1/15/2022	UIC SC 2008	\$	27.40	16.16		(1.04)		Predated Predated
System	Financing Capital	Bank, N.A. Loop Financial	Bank, N.A. Deutsche Bank AG	A+ / Aa3	Int Rate Swap	1/15/2022	UIC SC 2008	\$	26.85	15.83		(1.01)		Exception Predated
System	Financing	Products, I, LLC	(CSP)	A- / Baa2	Int Rate Swap	10/1/2026	HSFS 2008	\$	40.88	26.36		(2.65)		Exception
DEI Eutur	es Contracts):					S	UBTOTAL SWAPS	\$	95.13	58.35		(4.70)		
		INTL FCStone	InterContinental		Futures		Nat Gas Mult							
PEI	Utilities Admin	Financial Inc. INTL FCStone	Exchange (ICE) InterContinental	A / A2	Contract Futures	6/30/2018	FY2018 Nat Gas Mult	\$	0.91	0.53	0.53	0.00		
PEI	Utilities Admin		Exchange (ICE) InterContinental	A / A2	Contract	6/30/2019	FY2019	\$	2.93	2.93	2.96	0.03		
PEI	Utilities Admin		Exchange (ICE)	A / A2	Futures Contract	6/30/2020	Nat Gas Mult FY2020	\$	1.48	1.48	1.44	(0.04)		
PEI	Utilities Admin	INTL FCStone	InterContinental Exchange (ICE)	A / A2	Futures Contract	6/30/2021	Nat Gas Mult FY2021	e	0.36	0.36	0.33	(0.03)		
	Otilities Admin	Tilarcia irc.	Exchange (IOE)	71772	Contract	s	UBTOTAL Futures	\$	5.68	5.30	5.26	(0.04)		
Physica	l Hedges					SUBT	OTAL FINANCIAL	\$	100.81	63.65		(4.74)		
-	y Forward Pure	chases):	Qι BBB-/Baa	ualifying Rating 3 or BB+/Ba1 wit	h LOC									
		BP Canada Energy	BP Corporation North America , Inc.		Forward		Natural Gas							
PEI	Utilities Admin	Marketing Corp.	(PCG)	A- / A2	Purchase	6/30/2018	Mult FY18	\$	9.32	6.18	5.96	(0.22)		
							SUBTOTAL BP	\$	9.32	6.18	5.96	(0.22)	10.00	Adequate Assurance
חבו	Utilities Admin	EDF Energy	EDF Trading Limited (PCG)	NR / Baa2	Forward Purchase	0/00/0040	Nat Gas Mult FY2019		0.70	0.70	0.70	0.00		
PEI	Utilities Admin	Services, LLC	Limited (PCG)	NK / Baaz	Purchase	6/30/2019	SUBTOTAL EDF	\$	2.73	2.73 2.73	2.76 2.76	0.03	3.00	Adequate
														Assurance
		Exelon Generation	Exelon Generation		Forward		Electricity Mult							
PEI	Utilities Admin	Company LLC Exelon Generation	Company LLC Exelon Generation	BBB / Baa2	Purchase Forward	6/30/2018	FY18 Electricity Mult	\$	0.66	0.36	0.36			
PEI	Utilities Admin	Company LLC	Company LLC	BBB / Baa2	Purchase	6/30/2019	FY19 SUBTOTAL Exelon	\$	0.44 1.10	0.44	0.44	0.00	5.00	Credit
						`	OBTOTAL EXCION	Ψ	1.10	0.00	0.00	0.00	3.00	Assurance
		TransAlta Energy	TransAlta Corp		Forward		Electricity Mult							
PEI	Utilities Admin	Marketing (US) Inc.		BBB- / Ba1	Purchase	6/30/2018		\$	0.99	0.40	0.40			
		TransAlta Energy	TransAlta Corp		Forward		Electricity Mult							
PEI	Utilities Admin	Marketing (US) Inc.	(PCG)	BBB- / Ba1	Purchase	6/30/2019	FY19	\$	0.41	0.41	0.42			
PEI	Litilities Admin	TransAlta Energy	TransAlta Corp	DDD / Do1	Forward Purchase	6/30/2022	Electricity Mult FY22	¢	0.13	0.43	0.15			
rci	Otilities Admin	Marketing (US) Inc.	(PCG)	BBB- / Ba1	ruichase		TOTAL TransAlta	\$	1.53	0.13 0.94	0.15 0.97	0.03	10.00	Rating
														Triggers
			Shell Energy North		Forward		Electricity Mult							
PEI	Utilities Admin	America (US), L.P.	America (US), L.P.	A / A3	Purchase	6/30/2018	FY18	\$	3.95	1.56	1.58			
PEI	Litilities Admin	Shell Energy North America (US), L.P.	Shell Energy North	A / A3	Forward Purchase	6/30/2019	Electricity Mult FY19	\$	1.60	1.60	1.58			
r L1	Otilities Admin			A / A3		0/30/2019		Ψ	1.00	1.00	1.56			
PEI	Utilities Admin	Shell Energy North America (US), L.P.	Shell Energy North America (US), L.P.	A / A3	Forward Purchase	6/30/2020	Electricity Mult FY20	\$	0.51	0.51	0.49			
			Shell Energy North		Forward		Electricity Mult							
PEI	Utilities Admin	America (US), L.P.		A / A3	Purchase	6/30/2021	FY21	\$	0.24	0.24	0.24			
							SUBTOTAL Shell	\$	6.30	3.91	3.89	(0.02)	10.00	Rating Triggers
PEI Renev	vables):													
	,	Rail Splitter Wind	HSBC Bank USA,		Forward		Electricity Mult							
PEI	Utilities Admin	Rail Splitter Wind	(LOC) HSBC Bank USA,	AA- / Aa3	Purchase Forward	6/30/2018	FY18 Electricity Mult	\$	0.96	0.64				
PEI	Utilities Admin	Farm LLC	(LOC)	AA- / Aa3	Purchase	6/30/2019		\$	0.96	0.96				
DEI		Rail Splitter Wind	HSBC Bank USA,	AA / A=2	Forward	6/20/2000	Electricity Mult	\$	0.96	0.96				
PEI	Utilities Admin	Rail Splitter Wind	(LOC) HSBC Bank USA,	AA- / Aa3	Purchase Forward	6/30/2020	FY20 Electricity Mult	φ	0.96	0.96				
PEI	Utilities Admin		(LOC)	AA- / Aa3	Purchase	6/30/2021	FY21	\$	0.96	0.96				
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa3	Forward Purchase	6/30/2022	Electricity Mult FY22	\$	0.96	0.96				
		Rail Splitter Wind	HSBC Bank USA,		Forward		Electricity Mult							
PEI	Utilities Admin	Farm LLC	(LOC)	AA- / Aa3	Purchase	6/30/2023		\$	0.96	0.96				
PEI	Utilities Admin		HSBC Bank USA, (LOC)	AA- / Aa3	Forward Purchase	6/30/2024	Electricity Mult FY24	\$	0.96	0.96				
PEI	Utilities Admin	Rail Splitter Wind Farm LLC	HSBC Bank USA, (LOC)	AA- / Aa3	Forward	6/30/2025	Electricity Mult FY25	\$	0.96	0.96				
CI .	ounces Admin	Rail Splitter Wind	HSBC Bank USA,	AM- / ABS	Purchase Forward	0/30/2025	Electricity Mult	φ	0.96	0.96				
PEI	Utilities Admin		(LOC)	AA- / Aa3	Purchase	6/30/2026	FY26	\$	0.96	0.96				
PEI	Utilities Admin		HSBC Bank USA, (LOC)	AA- / Aa3	Forward Purchase	6/30/2027	Electricity Mult FY27	\$	0.20	0.20				
							TAL Renewables	¢	8.84	8.52	6.87	(1.65)	2.50	LOC
						00010	TITLE INCINCUIADIOS	φ	0.04	0.02	0.07	(1.00)	2.00	200
							OTAL PHYSICALS		29.82	23.08	21.25	(1.83)	2.50	

"Negative termination value means the System 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