## Derivatives Dashboard

Reported to the Board of Trustees July 21, 2022

5/31/2022

Policy Counterparty (CP) Requirements		Hedging Position Summary (In Millions)		Notional NTE		Collateral Summary					
Reporting Requirements Met	Yes (1) (2)	Interest Rate Swaps	\$	15.73 \$	6 (0.65	) Collateral Held by PEI on behalf of Counterparties:					
CP Rating Qualification Met	Yes (2) (3) (4)	Futures Contracts, Financial		18.40	12.7	3 Rail Splitter Wind (HSBC Bank LOC) \$	2,500,000				
Within CP NTE Limits	Yes (3) (6)	Forward Purchase, Physical <sup>(5)</sup>		37.00	40.1	9 TransAlta (Bank of Nova Scotia LOC) \$	25,000				
Under CP Concentration Limits	Yes	Solar PPAs <sup>(2)(4)</sup>		21.52	(25.03	) Northern Cardinal (Common Wealth Bank Australia LOC) \$	1,000,000				
					,	Direct Energy/NRG (Deutsche Bank NY LOC) \$	2,500,000				
		Total	\$	92.65 \$	5 27.23	Collateral Held by Counterparty on behalf of PEI:					
			=			Margin Exposure on Eutures	1 123 602				

## Material Events Since Last Report

## Counterparty (CP) Qualification Risk Management (3) (4)

\*\*On 5/18/22, Loop exercised the option in the HSFS 2008 Swap Deutsche Bank. There should be no change to the structure or rating which was being monitored for compliance with the agreement, as Deutsche Bank's rating was already being monitored

\*\*On 5/6/22, S&P revised the University's outlook from 'stable' to 'positive' along with rating actions taken on other public Illinois Universities. The A+/Positive rating is applied to the AFS, COPS and South Campus bonds. On 5/20/22, S&P affirmed the HSFS rating as 'A- / Stable'

\*\*PEI purchased 480,000 MMBTU's of Natural Gas Futures for UIUC from StoneX totaling \$2,028,000 for 7/1/27- 6/30/28. \*\*S&P upgraded Morgan Stanley to A-/Stable from BBB+ on 5/17/22. Morgan Stanley has NTE of \$14.67M, as an A rated CP is within PEI Policy for NTE net of collateral of \$20M.

The energy industry necessitated action by the PEI Board of Directors to agreement to put the swap back to the agreements credit provider, approve a policy accepting a lower credit rating than the System policy to qualify CPs for physical hedges (forward purchases). This exception has been approved by the U of I System CFO in accordance with the University Policy.<sup>(3)</sup> Rail Splitter is not rated but has provided a \$2.5 million LOC from HSBC Bank. TransAlta's rating declined below acceptable limits so they have provided a \$25,000 LOC from the Bank of Nova Scotia to meet policy qualifications. Direct Energy, through parent NRG, provided LOC from Deusche Bank AG for \$2.5 million. Northern Cardinal is not rated but have PCG, LOC, and approved gualification exception.(4)

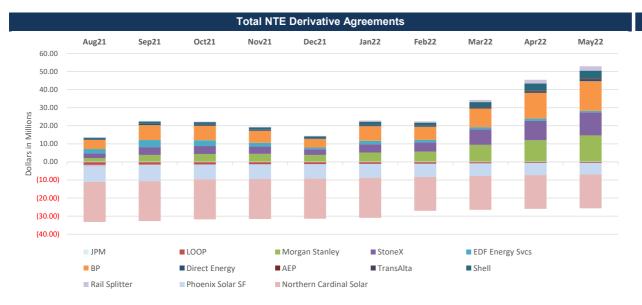
> The System and PEI policies require regular due diligence reviews of the financial strength of CPs. It is the responsibility of the hedging transaction originator, System department or PEI, to review the related CPs regularly in compliance with policy.

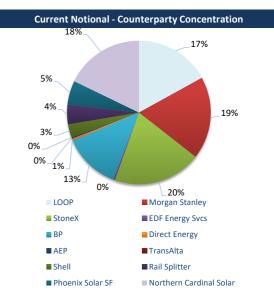
Exposure to a CP is determined by NTE value net of collateral and is limited based on CP credit rating. The PEI policy accepts a higher exposure limit on the BBB/Baa category than the university Policy; an approved policy exception. (3) (6)

Counterparty (CP) NTE Risk Management (3) (6)

BP, EDF, and AEP provide recourse through Credit or Adequate Assurances provisions if reasonable grounds exist regarding unsatisfactory creditworthiness or performance. It is incumbent upon PEI to monitor and request Performance Assurance if a rating change triggers the policy collateral requirements.

The swap agreement was approved by the BOT and executed prior to the policy. The collateral requirements for the CP on the interest rate swap is more risk tolerant than the System policy, however the current NTE exposure amount is within Policy limits.





					In Millions								
Responsible Unit/Dept.	Counterparty	CSP Rated Entity/ Exchange	Bond Rating (S&P / Moody's)	Expires FY Range	Underlying Asset / Liability	Oriç	g Contract	Current Notional / Contract	Market Value	*MTM or NTE (5)	System Guarantee (Credit Limit)	PCG - LOC (Credit Limit)	Counterparty Threshold (Collateral Requirements)
Financial H	ledges	(	Qualifying Rating										
System Interes	st Rate Swaps												
SO Capital	Loop Financial	Deutsche Bank AG											Rating Triggers
Financing	Products, I, LLC	(CSP)	A- / A2	10/1/2026	HSFS 2008	\$	40.88	15.73		(0.65)			Predate Policy
PEI Energy Futures Contracts					BTOTAL SWAPS	\$	40.88	15.73		(0.65)			
SO Utilities Admin	StoneX Financial Inc.	InterContinental Exchange (ICE)	A- / A3	2022-2028	Natural Gas	\$	20.97	18.40	31.13	12.73			None Exchange Traded
Admin			A-7 A3		TAL FINANCIAL		61.85	34.13	31.13	12.73			Traded
Physical He	anna	3,				φ	01.05	34.13		12.00			
-	orward Purchases		Qualifying Rating BB+/Ba1 with LC										
SO Utilities	BP Canada Energy	BP Corporation North											Adequate
Admin	Marketing Corp. <sup>(8)</sup>	America, Inc. (PCG)	A- / A3	2022-2025	Natural Gas	\$	17.17	11.82	28.22	16.40	10.00	1.00	Assurance
SO Utilities	Direct Energy	Deutsche Bank AG, NY											
Admin	Business Marketing	Branch (LOC)	A- / A2	2022-2024	Natural Gas	\$	1.11	0.47	1.13	0.66	2.50	2.50	LOC
SO Utilities	EDF Energy Services,	EDF Trading Limited		2022	Network Con	•		0.00	4.00	0.07			Adequate
Admin	LLC Morgon Stanlov	(PCG)	NR / Baa3	2022	Natural Gas	\$	5.26	0.36	1.23	0.87	3.00	3.00	Assurance
SO Utilities Admin	Morgan Stanley Capital Group, Inc.	Morgan Stanley (PCG)	A- / A1	2023-2027	Natural Gas	\$	17.14	17.14	31.49	14.35	5.00	Unlimited	Rating Triggers
SO Utilities	Shell Energy North	Shell Energy North											
Admin	America (US), L.P.	America (US), L.P.	A / A2	2023	Natural Gas	\$	2.54	2.54	6.87	4.33	5.00		Rating Triggers
SO Utilities	AEP Energy Partners	American Electric											
Admin	Inc.	Power Co, Inc.	A- / Baa2	2023 - 2024	Electricity	\$	0.25	0.25	0.75	0.50	0.50	0.10	Credit Assurance
SO Utilities Admin	Morgan Stanley	Morgan Stanley (PCG)	A- / A1	2022 2022	Floatrigity	•		0.00	0.44	0.00	5 00	1 I I'	Deting Triggers
SO Utilities	Capital Group, Inc. TransAlta Energy	The Bank of Nova	A-/AI	2022-2023	Electricity	\$	0.36	0.09	0.41	0.32	5.00	Unlimited	Rating Triggers
Admin	Marketing (US) Inc.	Scotia (LOC)	A+ / Aa2	2022	Electricity	\$	0.36	0.03	0.11	0.08	2.50	0.025	LOC
SO Utilities	Shell Energy North	Shell Energy North		2022	Licotholty	Ψ	0.50	0.05	0.11	0.00	2.50	0.025	200
Admin	America (US), L.P.	America (US), L.P.	A / A2	2022-2025	Electricity	\$	0.34	0.20	0.47	0.27	5.00		Rating Triggers
SO Utilities	Rail Splitter Wind Farm			2022 2020	Electricity	Ŧ	0.04	0.20	0.11	0.21	0.00		
Admin	LLC	(LOC)	A+ / Aa3	2022-2027	Renewable	\$	5.00	4.10	6.51	2.41	2.50	2.50	LOC
				SUBTO	TAL PHYSICALS	\$	49.53	37.00	77.19	40.19			
Solar PPAs	5												
UIUC Energy	Phoenix Solar South				Electricity								
Services - SF1				12/20/2025	Renewable	\$	13.76	5.01		(6.33)			
SO Utilities	Northern Cardinal	Commonwealth Bank of	AA- / Aa2							(/			
Admin - SF2	Solar SCS IL 1, LLC <sup>(4)</sup>	Australia (LOC) CD Clean Energy and Infrastructure (PCG)	NR NR	2/2021 - 2/2047	1 Electricity Renewable	\$	16.84	16.51		(18.70)	22.20	4.00	LOC, \$1M
		( )		SUBTOTA	AL SOLAR PPAs	\$	30.60	21.52		(25.03)			
Grand Tota	al				GRAND TOTAL		141.98	92.65		27.23			
*Negative termination value means the System or PEI is obligated to the counterparty (transaction is "underwater").				DUP - Derivativ	Credit Support Provider F			NTE - Net Termination Exposure PCG - Parental Company Guarantee PEI - Prairieland Energy Inc.			PPA - Power Purchase Agreement SO - System Offices WR - Withdrawn Rating		

## Footnotes:

(1) Policy exceptions approved by the CFO for Agriculture Property Services (APS) forward grain sales include release from counterparty credit rating, contract form, and monthly reporting requirements. APS reported \$206,433.76 in outstanding forward sales contracts as of 05/31/2022.

(2) In Dec 2015, UIUC issued a Power Purchase Agreement (PPA) in conjunction with their Solar Farm I. ERM learned of the PPA in July 2019 and began reporting the derivative Oct 2019. Since there is no CP risk, a policy exception was approved by the CFO for (a) minimum counterparty credit rating requirement, (b) required parental guarantee or LOC, and (c) minimum market capitalization requirement.

(3) Policy exceptions approved by the CFO for PEI include less restrictive CP credit rating for forward purchases and corresponding collateral requirements. For physical transactions, allows for unrated CP to qualify with LOC.

(4) On 10/3/19, a CP Exception for Urbana Solar Farm 2.0 was approved by the PEI Treasurer qualifying Northern Cardinal Solar SCSI IL 1, LLC (NCS) as a counterparty to be assigned the Power Purchase Agreement (PPA) for Solar Farm 2.0 from Sol Systems, LLC. This exception also qualified Capital Dynamics Clean Energy and Infrastructure VII JV, LLC as the guarantor for NCS. This exception also approved the PPA requirement for any unrated successor guarantor to qualify with \$100 million in tangible net worth. Contract term to 2/2/2041. CD Clean Energy and Infrastructure VII JV (InvestCo), LLC changed their name to "Arevon Energy InvestCo VII, LLC" and, notwithstanding such name change, all obligations of Guarantor under the Guaranty remain unchanged and in full force and effect.

(5) Contracted hedge prices on gas and electricity are favorable to current market prices. Natural gas market prices are higher due to an increase in demand, global impacts, and gas storage at 16% below the 5-year average. Electricity prices are higher due to an increase in demand, and generation costs from higher natural gas prices and other input fuel costs.

(6) Exposure to a CP is determined by the NTE value net of collateral and limited based on CP credit rating. The <u>PEI policy accepts \$10M exposure on BBB/Baa category</u> versus the University policy limit of \$0 on the same rating category. The PEI exposure limit difference to the university policy is an approved policy exception. Increased market prices on energy commodities have resulted in several "in the money" or positive NTE values. Those CPs in the BBB/Baa category that exceed the University policy exposure limit but are still within the PEI limit include: EDF \$0.87M and AEP \$0.5M.