**University of Illinois System**

**Derivatives Dashboard**

**Reported to the Board of Trustees**
**July 23, 2020**

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### Policy Counterparty (CP) Requirements

| Reporting Requirements Met | Yes (1)
| CP Rating Qualification Met | Yes (2)(3)(4)
| Within CP Exposure Limits | Yes
| Under CP Concentration Limits | Yes

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### Hedging Position Summary

| Interest Rate Swaps | $35.23 | $(3.18)
| Futures Contracts, Financial | $11.13 | $(1.05)
| Forward Purchase, Physical | $37.60 | $(2.45)
| Solar PPAs | $7.76 | $(9.85)
| **Total** | **$91.72** | **$(16.53)**

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### Collateral Summary

- **Collateral Held by PEI on behalf of Counterparties:**
  - Rail Splitter Wind (HSBC Bank LOC) $2,500,000
  - TransAlta (Bank of Nova Scotia LOC) $25,000

- **Collateral Held by Counterparty on behalf of PEI:**
  - Margin Exposure with INTL FC Stone $291,002

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### Material Events Since Last Report

PEI executed a contract with BP for natural gas delivery for 7/1/2021-6/30/2024.

PEI purchased 1,340,000 MMBTU's of natural gas forward contracts for UIUC from BP totaling $3,144,950 for 7/1/2021-6/30/2024. PEI purchased 510,000 MMBTU's of natural gas futures contracts for UIUC from FCStone totaling $1,307,100 for 7/1/2024-6/30/2026.

Federal action to mitigate financial crisis in ST markets has proven successful. The variable rate bonds and related SWAPs are in good standing. Capital Financing staff continue to monitor the trading activity of the U of I System's bonds, and meet with advisors and market experts. 

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### Counterparty Risk Management

The energy industry necessitated action by the PEI Board of Directors to approve a policy accepting a lower credit rating than the System policy to qualify counterparties for physical hedges (forward purchases). This exception has been approved by the U of I System CFO in accordance with the University Policy. 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.

The swap agreements were approved by the Board of Trustees and executed prior to the policy. The collateral requirements for counterparties on the interest rate swaps are more risk tolerant than the System policy, however the current NTE exposure amounts are all within Policy limits.

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### Policy Considerations & Other Comments

Exelon, BP, EDF, and Direct Energy 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 System and PEI policies require regular due diligence reviews of the financial strength of counterparties. It is the responsibility of the hedging transaction originator, System department or PEI, to review the related counterparties regularly in compliance with policy.

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### Total NTE Derivative Agreements

**Dollars in Millions**

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<tr>
<th>Aug19</th>
<th>Sep19</th>
<th>Oct19</th>
<th>Nov19</th>
<th>Dec19</th>
<th>Jan20</th>
<th>Feb20</th>
<th>Mar20</th>
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### Current Notional - Counterparty Concentration

- **JPM** 23%
- **LOOP** 8%
- **Morgan Stanley** 7%
- **FC Stone** 6%
- **EDF Energy Svcs** 3%
- **BP** 9%
- **Direct Energy** 12%
- **Exelon** 16%
- **TransAlta** 11%
- **Shell** 16%
- **Rail Splitter** 3%
- **Phoenix Solar SF** 0%

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## Derivatives Dashboard

<table>
<thead>
<tr>
<th>Responsible Unit/Dept.</th>
<th>Counterparty</th>
<th>Bond Rating (S&amp;P / Moody's)</th>
<th>Expires FY Range</th>
<th>Underlying Asset / Liability</th>
<th>Orig Contract</th>
<th>Market Value</th>
<th>System Guarantee (Credit Limit)</th>
<th>PCG - LOC (Credit Limit)</th>
<th>Counterparty Threshold (Collateral Requirements)</th>
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<tbody>
<tr>
<td><strong>Financial Hedges</strong></td>
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<td><strong>System Interest Rate Swaps</strong></td>
<td>Qualifying Rating</td>
<td>A- / A3</td>
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<tr>
<td>SO Capital Financing</td>
<td>Morgan Stanley</td>
<td>Morgan Stanley</td>
<td>BBB+ / A3</td>
<td>1/15/2022</td>
<td>UIC SC 2008</td>
<td>$27.40</td>
<td>7.11</td>
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<td>Rating Triggers</td>
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<td>Deutsche Bank AG (CSP)</td>
<td>BBB+ / A3</td>
<td>10/1/2026</td>
<td>HSFS 2008</td>
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<td>21.23</td>
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<td><strong>PEI Energy Futures Contracts</strong></td>
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<td>SO Utilities Admin</td>
<td>INTL FCStone Financial Inc.</td>
<td>InterContinental Exchange (ICE)</td>
<td>A / A2</td>
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<td>Natural Gas</td>
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<td><strong>Physical Hedges</strong></td>
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<td>BBB+/Baa3 or BB+/Ba1 with LOC or PCG</td>
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<td>Shell Energy North America (US), L.P.</td>
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<td>Eelon Generation Company LLC</td>
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<td>The Bank of Nova Scotia (LOC)</td>
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<td>Shell Energy North America (US), L.P.</td>
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<td>HSBC Bank USA, (LOC)</td>
<td>AA- / Aa3</td>
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<td>Electricity Renewable</td>
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<td>6.02</td>
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<td><strong>Solar PPAs</strong></td>
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<td>UIUC Energy Services</td>
<td>Phoenix Solar South Farms©</td>
<td>12/20/2025</td>
<td>Electricity Renewable</td>
<td>$13.76</td>
<td>7.76</td>
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<td><strong>Grand Total</strong></td>
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*Negative termination value means the System or PEI is obligated to the counterparty (transaction is "underwater").

### Qualifying Rating

- BBB-/Baa3 or BB+/Ba1 with LOC or PCG
- A- / A3

### System Guarantee

- Credit Assurance
- Predate Policy

### PCG - LOC

- Unlimited
- 0.025
- 0.02

### LOC

- Adequate Assurance
- 0.00

### NTE - Net Termination Exposure

- Underwater
- (Negative)

### Counterparty Threshold

- Rating Triggers
- Credit Assurance

<table>
<thead>
<tr>
<th>CP - Counterparty</th>
<th>CSP - Credit Support Provider</th>
<th>LOC - Letter of Credit</th>
<th>NTE - Net Termination Exposure</th>
<th>PPA - Power Purchase Agreement</th>
<th>SO - System Offices</th>
<th>WR - Withdrawn Rating</th>
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<tbody>
<tr>
<td>System Guarantee</td>
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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 $0 in outstanding forward sales contracts as of 05/31/2020.

(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. Allows for unrated CP to qualify with LOC.

(4) On 10/3/19, an Exception for Urbana Solar Farm 2.0 was approved by the PEI Treasurer qualifying Northern Cardinal Solar (NCS) as CP who was assigned the PPA from Sol Systems. Also qualified Capital Dynamics Clean Energy & Infrastructure as guarantor for NCS. Exception also approved, as allowed in the PPA, any unrated successor guarantor to qualify with $100 million in tangible net worth. Anticipate Solar Farm 2.0 to be operational by 1/31/2021 or sooner, at which time delivery of solar power will begin and included in the derivatives report.

(5) Federal actions to mitigate the financial crisis in the short term markets have since proven successful. Following the implementation of monetary policies, and the injection of stimulus funds, interest rates have dropped to lower than pre-pandemic rates and have remained steady. The variable rate bonds and related SWAPs are in good standing. Capital Financing staff continue to monitor the trading activity of the U of I System's bonds, and meet with advisors and market experts. Capital Financing staff are considering all options as market conditions evolve, including the opportunity to refund variable rate notes with fixed rate notes should the opportunity arise and be deemed favorable.