UNIVERSITY OF ILLINOIS
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Derivatives Use Policy

Updated and Approved by the Board of Trustees
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University of Illinois
Derivatives Use Policy

1. Statement of Purpose

The University in the course of carrying out its mission by performing normal and necessary business activities may be exposed to certain types of financial risks. These risks may be mitigated in part by the use of financial derivative instruments ("Derivative" or "Derivatives"[1]). The purpose of this **Derivatives Use Policy** ("policy") is to provide a framework for governance of the use of Derivatives by the University of Illinois ("University").

The University may use Derivatives only to reduce exposure to specific identified risks. **THE USE OF DERIVATIVES FOR SPECULATION IN ANY FORM IS EXPRESSLY FORBIDDEN.**

2. Subordinate Policies

University departments may implement specific policies or guidelines to manage their particular use of Derivatives, but those individual policies or guidelines:

- Are deemed subordinate to this policy.
- Must conform to the intent of this policy.
- May not contradict or supersede this policy.
- May not prescribe limitations that bypass or relax similar limitations specified within this policy.

3. Authorizations

- State of Illinois statutes that permit the University to use Derivatives include:
  1. *University of Illinois Act*, ILCS 305/7b
  2. *110 Ill. Comp. Statutes, §420*
  3. *Public Funds Investment Act, §230*
  4. *Illinois Finance Authority Act*

[1] Capitalized terms are defined in the Definitions section of this policy.

- The University is authorized by the Board of Trustees ("Board") to use certain specified Derivatives within the framework of this policy. At its discretion, the Board may approve additional Derivative types or may withdraw approval for previously approved types.

4. Responsibilities

The Vice President/Chief Financial Officer is responsible for managing this policy, maintaining its currency and ensuring that the University follows its requirements.

The Vice President/Chief Financial Officer on behalf of the University: (i) may enter into Derivative agreements that are consistent with and used in accordance with this policy, (ii) may modify or terminate those agreements as conditions warrant, and (iii) may designate individuals to act on his/her behalf in carrying out these duties.

The office of Enterprise Risk Management is responsible for monitoring and regular reporting of risks attendant with the use of Derivatives.

Originating University departments with Derivative agreements are responsible during the entire period those agreements are in place for: (i) managing those agreements in a professional and fiscally prudent manner, (ii) monitoring related markets and other factors that impact the contract's risk to the University, and (iii) providing regular written reports on status of Derivatives being managed, as described herein.

University departments desiring to enter into new derivative hedging programs must provide appropriate justification, as described herein.

5. Permitted Uses

The following uses of Derivatives are permitted:

- **Reduce the overall cost of capital.**
  - Reduce the cost of capital by mitigating risk related to treasury activities.
  - Take advantage of market opportunities to reduce financing costs.

- **Reduce the cost and price risk of energy commodities[2].**
  - Provide flexibility in managing the energy commodity procurement process.
  - Improve the matching of commodity purchase transactions to specific energy requirements.
  - Improve liquidity (by utilizing instruments that do not require an immediate cash outlay).
  - Improve market access and efficiency.
  - Improve the economic efficiency of physical assets.
- **Reduce agricultural commodity price risk.**
  - Manage price risk attendant with the marketing of agricultural commodities.
  - Expand the economic timing options for sales of agricultural commodities.
- **Manage invested and operational funds**.
  - Gain broad bond market exposure in a manner that does not create the effect of leverage in the overall portfolio.
  - Convert financial exposure in a given currency to that of another currency (for example, to hedge Japanese yen exposure back to the U.S. Dollar).
  - Adjust the Duration of a bond portfolio in a manner that is consistent with the accepted approach of the manager and other policies and guidelines provided to the manager.
  - Make other portfolio adjustments that are consistent with other elements of the University's investment policies and guidelines and that, when viewed from a total portfolio standpoint, do not increase risk or expected volatility of rate-of-return in the portfolio.
- **Additional approved uses**.
  - The Board, at its discretion, may approve other uses of Derivatives.

6. Permitted Types of Derivative Instruments and Related Uses

The approved types and uses of Derivatives are shown in the following table:

[2] Primarily natural gas and electricity.

Derivative Instrument	Permitted Use
Call Option / Put Option	Treasury management, energy management, agricultural commodity management
Cap	Treasury management, energy management
Collar	Treasury management, energy management
Forward Contract	Treasury management, energy management, agricultural commodity management
Futures Contract	Treasury management, energy management, agricultural commodity management
Spark Spread Option	Energy Management
Swap	Treasury management, energy management
Swaption	Treasury management

7. Limitations Regarding Use Of Derivatives

- **SPECULATION NOT PERMITTED.** All Derivative contracts must have an underlying asset or obligation that is being hedged, and the Notional Value of the Derivative must not be greater than the expected value or volume of the underlying asset or obligation.
- **LEVERAGE NOT PERMITTED.** Derivative structures that incorporate Leverage or result in amplified impacts similar to Leverage are not allowed.
- **CONSTRUCTION OF COMPLEX COMBINATIONS OF ALLOWED DERIVATIVES NOT PERMITTED WITHOUT APPROVAL.** Combining approved Derivatives to construct complex or Exotic Derivatives that bypass the intent of or exceed limitations prescribed within this policy are not allowed without approval from the Vice President/Chief Financial Officer.

- **LIQUIDITY MUST BE MAINTAINED.** Adequate Liquidity is required to provide for the possibility of Derivative termination at Fair Market Value.
- **PRICE TRANSPARENCY MUST BE EVIDENT.** There must be sufficient price transparency for each Derivative agreement so that economic and accounting valuations may be determined at all times.
- **SALE OF OPTIONS PRECLUDED.** The sale of uncovered options or options that result in substantial or unlimited negative risk for the University are precluded, <u>except</u> when selling an option is necessary to reverse an equal and opposite prior position or when a physical asset provides cover for the option.

8. Risk Evaluation

Each proposed Derivative transaction shall be assessed by the originating department to determine the types and degree of associated risk. This requirement shall apply to both Exchange Traded and Over-The-Counter ("OTC") purchases. Preparation of the risk evaluation summary is the responsibility of the originating University department and shall include the following factors[3]:

- Counter party risk – counterparty may not perform.
- Concentration risk - lack of diversification among Counterparties.
- Termination risk – termination of a Derivative contract by a counterparty due to certain defined events (e.g., default)
- Amortization risk – Derivative Notional Value and/or term are inconsistent with underlying asset or obligation.
- Basis risk – Derivative structure does not correlate with underlying asset or obligation.
- Tax risk – change in tax law impacts the purpose of the Derivative.
- Liquidity/remarketing risk – University liquidity is insufficient to cover reasonable termination values due, for example, to the inability to renew liquidity facilities.
- Administrative risk – lack of University expertise to manage Derivative inventory.
- Timing risk – tenor or profile of Derivative does not match underlying asset or obligation.

[3] Some risk factors may not apply for certain derivatives.

- Other risks specific to the type of Derivative being considered.

9. Procurement of Derivatives

Procurement of Derivative products shall be undertaken in accordance with the requirements of the State of Illinois Procurement Code (30 ILCS 500).

10. Counterparty Risk Exposure

The University shall enter into Derivative agreements only with qualified counterparties and shall limit its exposure to any single counterparty.

- Qualified Counterparties: It is the responsibility of the originating University department to document and monitor the qualifications of counterparties for current and proposed transactions and to ensure the following minimum requirements are met:
    - Each University department using or proposing to use Derivatives shall submit and maintain a list of qualified counterparties to be approved by the Vice President/Chief Financial Officer. For Exchange Traded Derivatives, the use of a nationally recognized exchange is sufficient to demonstrate the counterparty's qualifications.
    - Counterparties must be rated by either Standard & Poor's or Moody's Investor Services. If the counterparty is not rated by either Standard & Poor's or Moody's they can still qualify if their parent company is rated and a Parental Company Guarantee (PCG) benefiting the University is in place.
    - For OTC transactions, counterparties (or their parent, if a parental guarantee is in place benefitting the University in an amount sufficient to cover the University's Net Termination Exposure) must have: (i) a bond rating of at least A- (Standard & Poor's) or A3 (Moody's), and (ii) a capitalization of the greater of $100 million or five times the Notional Value of the proposed transaction.
    - Additional due diligence shall be conducted as required to provide sufficient assurance of the qualifications of a potential counterparty.
    - Qualifications of counterparties for existing contracts shall be reviewed and reported on as directed below by Section 12, by the originating department for each current Derivative transaction.

- Exposure to individual counterparties shall be quantified by determining the Net Termination Exposure value for individual existing counterparties on no less than a quarterly basis or as market or other conditions warrant. Exposure to individual counterparties shall be limited to the maximum Net Termination Exposure value (net of collateral), as shown in the table below. These limits shall be used to: (i) determine if a proposed transaction should be executed given existing and projected exposure to a specific counterparty, and (ii) monitor existing counterparties. If the exposure limit is exceeded by an existing counterparty, the University, in consultation with its legal counsel and external financial advisor, shall explore remedial strategies to mitigate the exposure and determine whether immediate action such as posting collateral or contract termination is required. Changing market conditions and other factors may require some flexibility and interpretation in determining a course of action.

Counterparty Credit Rating[4] (S&P / Moody's)	**Maximum Net Termination Exposure Net of Collateral[5]**
AAA/Aaa Category	$35 million
AA/Aa Category	$30 million
A/A Category	$20 million
BBB+/Baa1 or Below	$0 million

- Acceptable Collateral includes cash or Treasury securities to be held by a third party for the benefit of the University or a Letter of Credit from a qualified financial institution.

[4] If the counterparty has more than one rating, the lowest rating shall govern for purposes of determining the allowable level of exposure.
[5] Net of collateral posted by the counterparty with the University or its agent.

- Counterparty Concentration: Concentration shall be avoided by limiting the total net Notional Value per counterparty to 50% or less of total University-wide outstanding Notional Value unless the Vice President / Chief Financial Officer agrees to waive this limit under special circumstances.
- Exceptions: Any exception to this section must be documented and approved by the Vice President / Chief Financial Officer. Any exception approved must be shared with the University Office of Enterprise Risk Management as noted below in Section 12 and reported to the Board of Trustees through the quarterly Derivatives Use Report.

11. Documentation

All transactions involving Derivatives must be fully documented. Minimum documentation includes, but is not limited to:

- Statement of Purpose, summarizing the rationale for entering into the proposed Derivative contract.
- Risk Evaluation summary (see Section 8, above).
- Parental Company Guarantee, if applicable.
- Credit support, if applicable.
- Exceptions to Section 10, Counterparty Risk Exposure.
- Contract form for exchange traded transactions must include a confirmation statement and daily settlement statements.
- Contract form for non-exchange traded transactions must be one of the following, consistent with good business practices based on the credit worthiness of the counterparty:
    - Edison Electric Institute (EEI) Master Power Purchase & Sales Agreement.
    - North American Energy Standards Board ("NAESBE") standard contract.
    - International Swaps and Derivatives Association Master Agreement ("ISDA"), including the Schedule to the Master Agreement, Credit Support Annex, and for physical delivery transactions Power Annex and/or Gas Annex. ISDA documentation is required only for Derivatives purchased OTC. The Credit

Support Annex shall include the minimum counterparty qualifications as indicated in Section 10. The ISDA agreement shall include the following terms:

- The University reserves the right to terminate the Derivative contract at any time at market value.
- The University reserves the right to terminate the agreement at any time at its sole discretion.
- There shall be a minimum counterparty credit rating of A- (Standard & Poor’s) or A3 (Moody’s).
- Termination value shall be determined by Market Quotation methodology (unless circumstances suggest otherwise) and shall be in U.S. dollars.

12. Management and Reporting

Written reports on each existing Derivative contract shall be submitted on a monthly basis by the originating University department to: (i) the office of Enterprise Risk Management, and (ii) the departmental Dean or head of the next unifying administrative unit. Information in the report shall include the following for each contract:

- A description of the Derivative agreement.
- Highlights of all material changes to the existing Derivative agreement.
- Net Termination Exposure.
- The current credit rating of the counterparty or counterparties.
- Any material factors that impact risk to the University by the counterparty or the Derivative employed.
- Summary of collateral held by the University on behalf of each counterparty and collateral held by each counterparty on behalf of the University.
- A summary of new agreements entered into since the last report and a summary of existing agreements that have been terminated since the last report.
- A summary of exceptions to Section 10, Counterparty Risk Exposure.

The office of Enterprise Risk Management shall be charged with aggregating the monthly reports and shall submit a summary report to the Board no less frequently than once per quarter. The report shall include the following:

- Summary discussion of the status of University Derivative risk position and outlook.
- Summary of Derivative contracts, including total notional value, grouped by University department.
- Material events since last report for each counterparty.
- Profile of Net Termination Exposure, credit limit and credit rating by counterparty.
- Termination value for each transaction.
- Summary of collateral held by the University on behalf of each counterparty and collateral held by each counterparty on behalf of the University.
- Summary market value.
- Noted exceptions to Section 10, Counterparty Risk Exposure.

13. Miscellaneous Provisions

- Margin or collateral requirements arising from Derivative use are the responsibility of the originating University department.
- Active management of outstanding Derivative agreements may include modifications of existing positions over time to maintain an appropriate hedging position, including:
    - Early termination of all or a portion of any derivative.
    - Shortening or lengthening the term (subject to other restrictions in this policy).
    - Sale or purchase of options to reverse a prior position.
    - Application of Basis Swaps.
    - Changing the floating leg of a Swap.
- The implementation of a hedge program for a specific risk may include the integrated use of multiple derivatives. When a multiple-derivative hedge is implemented, actions to manage the hedge must consider the overall, net effect of all of the derivatives employed for that purpose (subject to the limitations in Section 7, above).
- University Related Organizations ("UROs") may utilize Derivatives subject to the approval of their respective boards of directors. Those boards of directors of UROs

intending to enter into Derivative contracts are encouraged to adopt a policy for Derivative oversight similar to or identical to this Derivatives Use Policy.

14. Definitions

Call Option / Put Option - Call option allows the holder to buy the underlying instrument at a set price during a defined period, while a put option allows the holder to sell the underlying instrument at a set price during a defined period. Options are traded on exchanges or over-the-counter.

Cap - Used to limit exposure to rising interest rates or commodity prices. Caps are equivalent to purchasing a call option. Caps are typically traded over-the-counter.

Collar - Used to establish an upper and lower limit on commodity prices or interest rates. Collars are equivalent to purchasing a call option and selling a put option. Collars are typically traded over-the-counter.

Counterparty – The party on the other side of a Derivative transaction.

Counterparty Concentration - An inordinate notional amount of derivatives transacted with a single counterparty. The risk is that the counterparty would fail or otherwise expose the University to financial harm.

Derivatives – Financial contracts that derive their value from the performance of underlying assets or liabilities (such as a bond or physical commodity), interest or currency exchange rates, or a variety of indices. Derivatives include a wide assortment of financial contracts, including swaps, futures, forwards, options, caps, floors and collars, whose value is based on defined formulae that apply to notional (or hypothetical) amounts.

Duration - a measure of the sensitivity of a bond's price to interest rate.

Edison Electric Institute (EEI) – The association that represents the US investor-owned electric utility companies.

Edison Electric Institute Power Purchase & Sales Agreement – A model bilateral master agreement, containing the essential terms governing forward purchase and sales of wholesale electricity.

Exchange Traded – A financial instrument purchased or sold on an organized exchange, as opposed to an over-the-counter transaction. Exchange Traded instruments have standardized terms, and the related trading activities are regulated.

Exotic Derivatives - Derivative instruments employing leverage or other complex structures (based on combinations of various Plain Vanilla Derivatives) to magnify the effects. Exotic

Derivatives are frequently employed for speculative purposes and may result in increased, rather than decreased risk.

Fair Market Value – the price at which a financial instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

Forward Contract - Agreement between two parties that commits one party to purchase and the other to sell the instrument or commodity underlying the contract at a specified future date with a fixed price, specified quantity and specified quality. Forward contracts are typically traded Over-The-Counter and are most often settled physically.

Futures Contract - Standardized forward contracts traded on organized exchanges. Each exchange specifies the standard terms of futures contracts it sponsors. The exchange effectively guarantees fulfillment of the contracts to both the buyer and seller, thereby eliminating credit risk to both parties. In return, each party posts collateral in the form of a cash margin deposit. The vast majority of futures contracts are closed out on or before the delivery date through the use of offsetting contracts.

Hedging – Protecting against risk of loss exposure by offsetting, limiting or reducing the risk or substituting another lesser risk.

ISDA Master Agreement – The most commonly used master service agreement for OTC derivative transactions internationally. It is part of a framework of documents, designed to enable OTC derivatives to be documented fully and flexibly. The framework consists of a master agreement, a schedule, confirmations, definition booklets, and a credit support annex. The ISDA master agreement is published by the International Swaps and Derivatives Association.

Letter of Credit (LOC) – A traditional Letter of Credit is a document issued by a financial institution assuring a buyer's payment to a seller will be received on time and for the correct amount. In the event that the buyer is unable to make payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase. In the case of an energy transaction, where PEI is the buyer, a Letter of Credit is a document issued by a qualified financial institution assuring payment from the bank to cover PEI's Net Termination Exposure in the event that the counterparty is unable to perform.

Leverage – In the case of Derivatives, using structural techniques to amplify the effects. Derivatives are considered leveraged if they expose the counterparty to loss in excess of gains expected to be generated by positions and transactions they modify. Leverage generally does not reduce risk and often is considered a form of speculating.

Liquidity – ability to convert assets into cash or cash equivalents without significant loss.

Market Quotation Method – Has the meaning defined in the of International Swaps and Derivatives Association Master Agreement.

North American Energy Standards Board (NAESB) – Provides many processes for standards development and group decision-making.

Net Termination Exposure - The estimated net termination payment to one counterparty by the other counterparty (or counterparty's guarantor) for all existing and projected Derivative transactions. The net termination payment is equal to: (i) the termination payment based on the market value of all existing derivatives, plus (ii) the expected worst-case termination payment of all proposed transactions with this counterparty. In the case of an energy transaction, where PEI is the buyer, the Net Termination Exposure is the difference between the contracted purchase amount and the current market price.

Notional Value – A theoretical or stipulated principal dollar amount or volume, agreed upon by the counterparties, upon which many Derivative contracts are based.

Over-The-Counter - A privately negotiated contract between two counterparties, as opposed to standardized, exchange-traded contracts.

Parental Company Guarantee (PCG) – A declaration issued by a parent company in regard to one of more of its subsidiaries aimed at providing assurance to a potential client or partner of the subsidiary that the business is capable of honoring all obligations that are connected with the proposed business relationship. This guarantee commits the parent to stepping in and honoring the terms of the contract if the subsidiary should fail to do so for any reason.

Plain Vanilla Derivatives – Derivatives that are well defined, simple in structure and generally do not employ leverage or complex terms. Plain Vanilla Derivatives may be traded on an Exchange (where there is active trading and prices are regularly quoted) or Over-The-Counter.

Risk Assessment – Identification and analysis of risks relevant to achieving objectives that form a basis for determine how risks should be managed.

Spark Spread Option – An option on the simultaneous long position in electrical power and short position in fuel (typically natural gas). Simulates profit from operating a power plant.

Speculation – Increasing risk for possible greater gain. Speculation would occur if Derivatives were to be used in a manner that is either unrelated to reducing specified risks or is not expected to reduce business or other identified risks.

Swap – An agreement between two parties to exchange periodic payments over a specified period of time. For example, an interest rate swap involves one party with variable-rate interest payments exchanging cash flows with a counterparty to receive the same variable-rate cash flow in exchange for paying a fixed-rate cash flow, effectively converting variable-rate debt to fixed-rate debt. Swaps are generally negotiated over-the-counter.

Swaption – A Swap combined or linked with one or more options.