O-25-97

ORDINANCE NO. ________

AN ORDINANCE ADOPTING A REVISED ENERGY RISK MANAGEMENT POLICY FOR THE NORTH LITTLE ROCK ELECTRIC DEPARTMENT; REPEALING ORDINANCE NO. 9296; DECLARING AN EMERGENCY; AND FOR OTHER PURPOSES.

WHEREAS, the North Little Rock Electric Department ("NLRED") manages the city-owned electric utility system for the City of North Little Rock (the "City"), providing electric service to areas in North Little Rock, Sherwood and surrounding areas within Pulaski County, Arkansas; and

WHEREAS, some of the most significant expenditures made by the City relate to the purchase of wholesale power; and

WHEREAS, since the adoption of Ordinance No. 8771 on October 12, 2015, as amended by Ordinance No. 8786 adopted January 26, 2016, Ordinance No. 8815 adopted May 23, 2016, Ordinance No. 8944 adopted September 26, 2017, and Ordinance No. 9181 adopted October 28, 2019, the City has managed the risk of wholesale power cost fluctuations through the North Little Rock Electric Department Energy Risk Management Policy ("Risk Management Policy"); and

WHEREAS, the Risk Management Policy requires the Risk Management Committee, NLRED staff, and the City's Power Manager (Tenaska) to follow a Hedge Plan (Appendix E to the Risk Management Policy) in order to manage the City's exposure to wholesale power cost fluctuations within acceptable risk limits; and

WHREAS, on October 26, 2020, the City Council adopted Ordinance No. 9296, adopting a revised Energy Risk Management Policy for the NLRED and repealing Ordinance No. 8771 and subsequent amending ordinances; and

WHEREAS, Ordinance No. 9296 made substantive changes to the Hedge Plan to eliminate five-year hedge plan limits and to implement required compliance with monthly hedge limits on a rolling twelve (12) month basis and recommended compliance with monthly hedge limits on a rolling thirteen to twenty-four (13-24) month basis; and

WHEREAS, since implementation of the hedge plan adopted by Ordinance No. 9296, market conditions have changed significantly, and after consultation with the Power Manager, the Risk Management Committee has unanimously recommended that the Risk Management Policy be revised, with a summary of the revisions set forth in Exhibit A.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NORTH LITTLE ROCK, ARKANSAS:

SECTION 1: That the North Little Rock Electric Department Energy Risk Management Policy, attached hereto as Exhibit B and incorporated herein by reference, is hereby adopted.

SECTION 2: That Ordinance No. 9296 is hereby repealed.

SECTION 3: That all other ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

SECTION 4: That the provisions of this Ordinance are hereby declared to be severable and if any section, phrase, or provision shall be declared or held invalid, such invalidity shall not affect the remainder of the sections, phrases or provisions.

SECTION 5: It is hereby found and determined that the community and NLRED customers will benefit from reliable and efficient delivery systems with a goal of providing a reliable, responsible and affordable electrical service in the City, and that the City and the residents thereof can best be served by the adoption of this Ordinance; THEREFORE, an emergency is hereby declared to exist, and this Ordinance being necessary for the immediate preservation of the public peace, health and safety, shall be in full force and effect from and after its passage and approval.

ADOPTED:

____

APPROVED:

____
Mayor Terry C. Hartwick

SPONSOR:

Terry C. Hartwick by AF
Mayor Terry C. Hartwick

ATTEST:

____
Diane Whitbey, City Clerk

APPROVED AS TO FORM:

____
Amy Beckman Fields

PREPARED BY THE OFFICE OF THE CITY ATTORNEY/ABF

FILED 10:50 A.M. ________ P.M.
By AmyFieldsCA
DATE 11-18-25
Diane Whitbey, City Clerk and Collector
North Little Rock, Arkansas
RECEIVED BY ______________

Summary of Revisions to
Energy Risk Management Policy

- Major revisions
    - Appendix E - Hedge Plan
        - Decreased the required compliance window for monthly hedge limits from 12 to 9 months
            - Benefit: Shortening the required compliance window reduces exposure to weather-inflated forward curve premiums and increases operational flexibility, allowing the RMC to strategically transact during more neutral market conditions.
        - Added March and September to the shoulder month category
            - Benefit: By shifting March and September into the shoulder month category, the policy now reflects the generally lower volatility and milder weather patterns typical of these months in MISO South. Less aggressive requirements in spring and fall reduces the likelihood over over-hedging in seasons that historically present lower risk.
        - Reduced the minimum hedge limit for non-shoulder months from 80% to 75%
            - Benefit: Lowering the minimum hedge limit requirement allows for optimized hedge costs and enables the RMC to manage market risk opportunistically rather than reactively.

- Minor revisions
    - Updated job titles
    - Removed standing alternate language

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EXHIBIT
A

North Little Rock Electric Department

City of North Little Rock, Arkansas

Energy Risk Management Policy

Adopted by the North Little Rock City Council

Ordinance No. _______ (November 24, 2025)

EXHIBIT

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B

Table of Contents

I. Scope, Objectives and Purpose of Policy

The North Little Rock Electric Department ("NLRED") manages the city-owned electric utility system for the City of North Little Rock, Arkansas ("City"). NLRED provides electric service to areas within North Little Rock, Sherwood, and surrounding areas within Pulaski County, Arkansas. The City is governed by an eight-member council. Rates and fees are recommended by NLRED and then voted and established by the City Council, consistent with state law.

Historically, NLRED existed as an electric distribution entity owning no generation or transmission assets. In 1989, NLRED completed construction of the 42MW Murray Hydroelectric Generation Plant ("Murray Hydro") which is located within the City limits. On average, Murray Hydro provides approximately thirteen percent (13%) of NLRED's energy requirements. In 2007, NLRED entered a purchase power agreement with Waste Management, Inc. to buy all power produced at their Two Pine landfill gas generator, which remains effective today. Two Pine satisfies approximately three percent (3%) of NLRED's energy requirements. In 2010, NLRED acquired a 60MW interest in Plum Point Energy Station ("PPES"), a coal-fired generator located in Osceola, Arkansas. On average, Plum Point provides approximately forty-two percent (42%) of NLRED's energy requirements. NLRED acquires all other energy through bilateral contracts and the MISO market, along with minor distributed generation assets.

Prior to the existence of the MISO market in Arkansas, NLRED fulfilled remaining energy requirements exclusively through full-requirements contracts. Since the MISO market opened, NLRED has borne market risk for loss of production from organic assets, with remaining energy requirements filled through a load-following bilateral contract. Market risk has been managed through bilateral contracts or reasoned acceptance of market price fluctuation.

As described herein, the City Council's objective in adopting this Risk Management Policy ("Policy") is to identify risks; to understand the economic impact of these risks on NLRED; to manage or mitigate risks to an acceptable level consistent with this Policy. This Policy defines the procedures and controls to be used by staff and a third-party energy trading and risk management entity ("Power Manager"). The Policy will be implemented and overseen by a Risk Management Committee ("RMC"). The Policy, and the actions taken pursuant to the Policy, as directed and overseen by the RMC, constitute NLRED's Risk Management Program ("Program").

The Policy's scope covers all wholesale power and fuel contracts within or considered for NLRED's risk management portfolio. In addition to the wholesale contracts, the scope of the portfolio also includes electric power generation capacity, fuel requirements, forecasted electric power demand, transmission, and ancillary services.

Both NLRED and the Power Manager must recognize the need to formalize, install, and maintain management processes and controls related to power supply contracts, as well as related business activities, which inherently involve risk (as further described in Section V of this Policy). To that end, NLRED wishes to document the policies and procedures for managing such risk.

A. Background/Purpose of the Policy

NLRED contributes high value to its community and customers by providing energy and related services using reliable and efficient delivery systems. NLRED's goal is to serve the electric loads of its customer-owners in a reliable, responsible, and affordable manner, acting to optimize the value of our power supply assets in order to minimize rates.

The following are the goals and objectives for the risk management program:

1. Manage the price volatility and volume risk of its net position consistent with the risk tolerance of

the City Council.
2. Manage credit risks and monitor movements in the forward market price (mark-to-market) for wholesale power and fuel.
3. Demonstrate to the City Council that appropriate diligence is being exercised regarding oversight of power supply activities.

This Policy sets minimum expectations, controls, and procedures for the RMC to refine and implement. NLRED staff and the Power Manager will use this Policy to manage NLRED's exposure to wholesale energy commodity market prices and to govern the Power Manager's contracting and trading activities, as they pertain to commercial energy transactions. This Policy details the risk management philosophy under which NLRED will conduct its activities; identifies organizational elements of the Program that reside within NLRED; identifies the risk management tools and techniques that NLRED and its Power Manager will utilize to manage NLRED's risk exposures; specifies the risk measurement methodologies to be used; and sets forth the reporting requirements. This Policy also recognizes that the basis for strong risk management is the expertise and judgment of the management and staff responsible for performing the specific processes and procedures necessary to comply with this Policy.

B. Risk Philosophy

The City recognizes that as a result of procuring a majority of its power supply needs via wholesale energy markets, it is necessary to accept reasonable exposure to power market price volatility in order to maximize the benefits of its power supply portfolio. In achieving this goal, the RMC will not engage in speculative commodity market activities in an attempt to achieve additional gain. Also, the RMC and its Power Manager recognize the significant financial and operational threat of being physically short of power supply. Above all financial considerations, the reliability of electric service is paramount. All transactions shall be made to optimize resources and meet customer requirements.

C. Segregation of Duties

Segregation of duties, also referred to as "separation of function," is fundamentally required to control risk. Individuals responsible for legally binding the organization to a transaction will **not** also perform confirmation, clearance or accounting functions. NLRED will maintain appropriate segregation of duties in its organization and activities and will ensure the same within its Power Manager.

D. Policy Approval

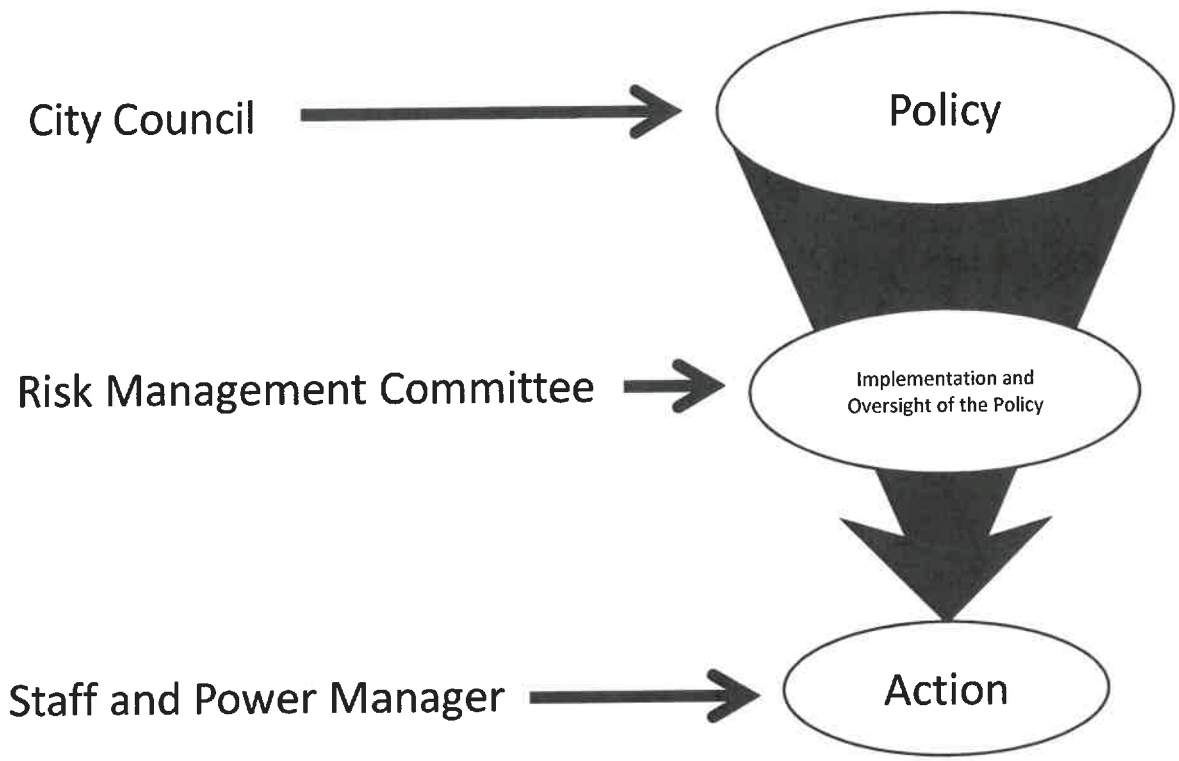
The City Council must approve modifications to this Policy. The level of authority required to modify various aspects of NLRED's risk management program is set forth below.

To Modify:	Requires the Approval Of:
Market and Credit Risk Limit	The City Council
Authorized Regions	RMC
Authorized Traders	RMC
Approved Products and Instruments	RMC
Approved RMC Delegations	RMC
Hedge Plan	The City Council

II. Governance and Organizational Structure

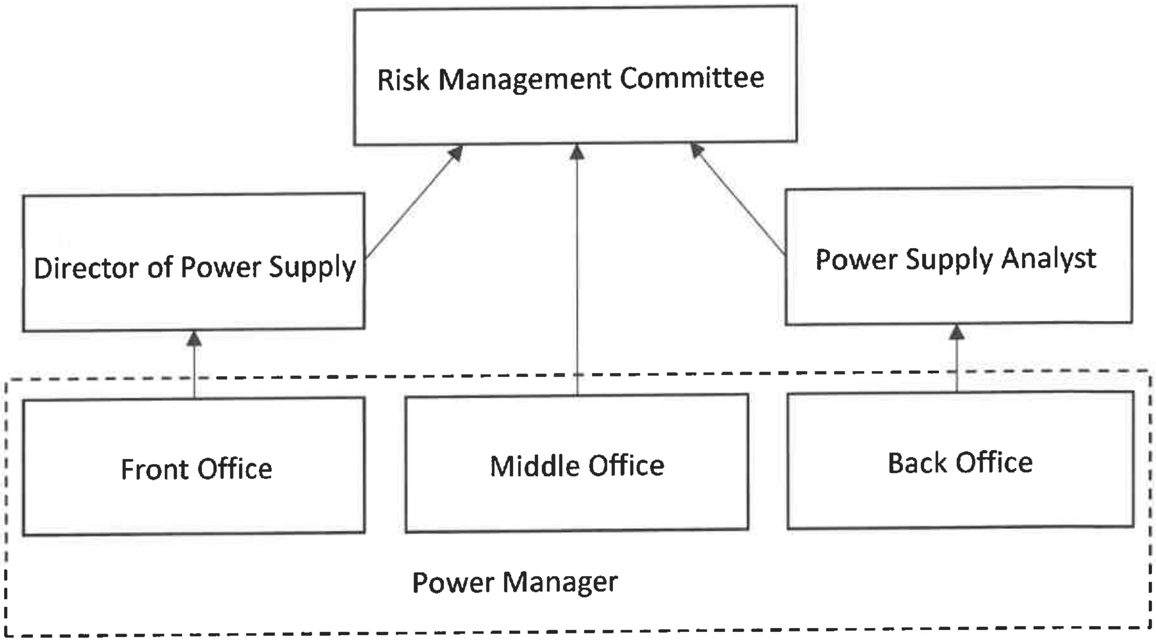
This Risk Management Policy is enacted by the NLR City Council under the authority of Ark. Code Ann. §§ 14-43-601 and 602; Ark. Code Ann. §§ 14-54-701 and 704; Ark. Code Ann. §§ 14-200-106, 109, 111, and 112; Ark. Code Ann. § 14-202-101, et seq.; and the common law of the State of Arkansas. The Program, and associated delegations of authority are specifically made under the same authority.

Framework of Risk Management Program



To facilitate risk management effectiveness, segregation of duties, and timely communication, the NLR risk management framework implements a "Front-Middle/Back Office" model that provides for independent risk oversight. The RMC shall provide oversight of all activities governed by this Policy and ensure Policy requirements are met. In addition, it is anticipated that certain aspects of the execution of the "Front-Middle/Back Office" functions will be undertaken by the Power Manager.

Lines of Responsibility



Roles and Responsibilities

Responsibilities for monitoring NLRED's risk management program exist at all levels of management. Generally, the following delegations have been made:

1. North Little Rock City Council

The City Council is the approval authority of this Risk Policy, which shall not be delegated. The City Council expressly retains the following responsibilities:

a. To use reasonable efforts to understand the nature of the risks encountered in managing NLRED's resource portfolio.
b. To use reasonable efforts to understand the methods and procedures that will be employed to manage risk;
c. To approve amendments to Policy Credit and Risk Limits;
d. To review the RMC's compliance with this Risk Management Policy and reasonably respond to instances of noncompliance;
e. To approve the NLRED Hedge Plan contained in Appendix E of the Policy; and
f. To delegate implementation of the Risk Management Policy to NLRED's RMC.

2. Risk Management Committee

The RMC has primary operational risk oversight. The RMC shall be comprised of the following voting members: the NLRED General Manager, the City's Chief Financial Officer, and a representative designated by the Mayor. Additionally, the RMC shall be comprised of the following non-voting members: the City Attorney, the Director of Power Supply, and the Power Supply Analyst. Each member of the RMC may temporarily designate a qualified and capable representative to serve in his/her absence.

Risk Management Committee

Voting Members		
General Manager	Mayor's Rep.	Chief Financial Officer
Non-Voting Members		
Director of Power Supply	City Attorney	Power Supply Analyst

The Chief Financial Officer shall act as the Chairperson of the RMC. The Chairperson may recommend to City Council the addition of new voting members to the RMC; however, the new member must be approved by NLR's City Council before permanent voting rights are granted to the new member. Any member of the RMC may direct, through the General Manager, other NLRED personnel to attend and provide information or advice at the RMC meeting. The RMC may, by majority vote, add nonvoting members to the RMC. The City Council delegates to the RMC ongoing maintenance and enforcement of NLRED's approved policies and procedures for trading and risk management. The responsibilities of the RMC shall be:

a. To monitor the market price risk and counterparty risk of NLRED's portfolio to ensure that such risks are within approved limits and being managed in a manner consistent with these documented policies and procedures.
b. To accept responsibility for the results of the RMC activities undertaken on NLRED's behalf.
c. To receive and review risk reports submitted by Power Manager.
d. To review and approve changes to existing, and any new, risk reports.
e. To evaluate the risk/reward relationship of proposed transactions in order to ensure consistency with NLRED's overall business strategies, risk tolerances, and yearly budget plans.
f. To approve new products and instruments in order to ensure that products are consistent with business and risk management infrastructure.
g. To establish qualitative and quantitative limits for hedging products at levels that are more restrictive than those approved by City Council.
h. To evaluate and approve methodologies and models used for long- and short-term load and resource forecasting, and market and credit risk measurement.
i. To ensure that segregation of duties exists at the Power Manager.
j. To approve procedural changes associated with maintenance and operation of trading and risk management, and recommend Policy changes to the City Council.
k. To authorize the Director of Power Supply and the Power Manager to execute certain specific and limited transactions. Such transactions will include: real-time and daily purchases and sales of power and fuel used in the production of electricity. The Power Manager also shall be granted limited term trade approval authority as described in Appendix D, Power Manager's Authorized Transaction Limits. Specifically, the Power Manager is authorized to commit NLRED to forward

sales and purchases of electricity, and fuel used in the production of electricity, as necessary to stay within risk and hedge limits.

l. To update the Power Manager on all NLRED Risk Policies, Procedures and Program changes.
m. To review the trading and risk management practices of the Power Manager every odd year, and ensure compliance with the Risk Management Policy.
n. Periodically review NLRED's and the Power Manager's Policies and Procedures for compliance and consistency.
o. Report to the City Council any lack of sufficiency of the Power Manager's trading and risk infrastructure and its overall compliance with policies and procedures.
p. To provide Risk Management Policy training on an as-needed basis to new and existing NLR City Council members.
q. To approve variable rate components that reflect the cost of electricity provided to customers and inform City Council as directed.
r. To recommend a Hedge Plan to City Council for approval.

The RMC will conduct regular meetings. The Chairperson may call additional special meetings according to such rules and procedures as may be approved by a majority vote of the RMC. Meeting minutes will be approved by a majority vote of the RMC and filed with the NLR City Clerk.

3. City Attorney

The City Attorney is a nonvoting member of the RMC who functions as the RMC's primary representative in the aspect of legal compliance, including the Arkansas Freedom of Information Act, state fiscal law, and this Policy. The City Attorney shall have an independent duty to report any failure to comply with this Policy to City Council. While no procedural rules are mandated for the RMC, the City Attorney shall ensure meetings are conducted fairly, and in a manner generally consistent with other voting boards of the City. The City Attorney shall draft such documents as may be required by the RMC to implement this Policy, including such proposed amendments to this Policy that may, from time-to-time, be approved by the RMC.

4. Chief Financial Officer

The Chief Financial Officer is a voting member of the RMC who functions as the RMC's primary representative in the financial and controls aspects of trading and risk management. The Finance Director shall act as the Chairperson of the RMC. The RMC Chairperson will have independent reporting responsibility to the City Council, and will assure that the following responsibilities are carried out:

a. Review specific risk and trading limits and hedging methodologies, and from time-to-time recommend changes to the RMC.
b. Review credit policies and contract templates of the Power Manager.
c. Engage the RMC with the purpose of facilitating the understanding of NLRED's risk position and the means to manage it;
d. Monitor risk reports between RMC;
e. Ensure that compliance with all policies and limits is maintained; report Policy violation or improprieties to the City Council;

5. General Manager

The NLRED General Manager is a voting member of the RMC who functions as the primary representative of NLRED in the reliability aspects of trading and risk management. The General Manager will ensure that adequate meeting space is available for the RMC, including teleconference access for the Power Manager. The General Manager will direct NLRED employees to attend the RMC meeting as requested by any member of the RMC.

a. Provide information to the RMC regarding the production and availability of generation resources.

b. Participate in the RMC with the purpose of understanding NLRED's risk position and the means to manage it;
c. Monitor risk reports between RMC meetings;

6. Mayor's Representative

The NLR Mayor shall appoint a person who shall be a voting member of the RMC and will act as the RMC's primary representative in the responsibility aspects of trading and risk management. The Mayor's Representative shall

a. Review and update the RMC concerning environmental and policy objectives of the City and the effect of those objectives on the Risk Management Program.
b. Participate in the RMC with the purpose of understanding NLRED's risk position and the means to manage it;
c. Monitor risk reports between RMC meetings;

7. Director of Power Supply

The Director of Power Supply is a nonvoting member of the RMC and will act as the RMC's primary representative in the operational aspects of trading and risk management. The Director of Power Supply will communicate directly with the Power Manager's Front Office and, in this role, maintains day-to-day responsibility for the execution and management of transactions governed by this Policy. In this capacity, the Director of Power Supply will have the following duties and responsibilities:

a. Review and recommend approval of the Monthly Operating Plans developed by the Power Manager for consistency with the Risk Management Policy and Plan;
b. Review specific risk and trading limits and hedging methodologies and, from time-to-time, recommend changes to the RMC;
c. Approve transactions that are beyond the Power Manager's limits but within RMC delegated authority of the Director of Power Supply;
d. Monitor risk reports between RMC meetings.
e. Recommend new products for RMC approval

8. Power Supply Analyst

The Power Supply Analyst is a nonvoting member of the RMC and will act as the RMC's primary representative in the evaluation and cost assignment aspects of trading and risk management. The Power Supply Analyst will communicate directly with the Power Manager's Back Office and, in this role, maintains day-to-day responsibility in understanding and reporting market and credit exposure. The Power Supply Analyst will calculate the cost of power for determination of variable rate components by the RMC. The Power Supply Analyst (Analyst) is also responsible for managing the Compliance Reporting spreadsheet as well as the Power Portfolio Analysis spreadsheet, which serves as a check against the Power Manager's modeling and records.

9. Power Manager - Front Office

The Front Office of the Power Manager reports to the Director of Power Supply. The Power Manager's Front Office has overall responsibility for (1) managing all commodity and transportation activities related to procuring and delivering fuel to NLRED's generating facilities, (2) the analysis of fundamentals affecting load and supply factors that determine NLRED's net position, and (3) trading within the limits in Appendix D to balance loads and resources, maximize the value of NLRED's assets through the exercise of approved optimization strategies, for forecasting load and resource output during the last days prior to delivery. Other duties associated with these responsibilities include:

a. Prepare (with Middle Office oversight) a forward position report not less frequently than monthly and report the results to the RMC.
b. Assist in the development and analysis of risk management hedging products and strategies, and bring recommendations to the RMC.

c. Execution of term fuel transactions

d. Review of all commodity and transportation arrangements to ensure adequacy of transactions and compliance with pipeline and generator requirements

e. Develop, analyzes and negotiates natural gas hedging transactions, and bring to the RMC for consideration.

f. Prepare each month an operating plan that will give direction to the day-ahead and real-time trading and scheduling staff regarding the optimization of NLRED's resource portfolio. The operating plan, at a minimum, will contain the following analysis and information:

   i. Forecast of expected loads, and extreme loads during winter and summer months

   ii. Expected generation output and availability, to include known generator outages

   iii. Discussion of any relevant technical analysis or regulatory requirements

g. Formula for determining incremental cost of natural gas-fired generation and any information regarding operating restrictions

h. Develop, price and negotiate hedging products

i. Forecasting day-ahead and monitoring/ forecasting same-day loads;

j. Planning and executing transactions in the pre-schedule and real time markets for power and transmission to balance load and maximize the value of the resource portfolio;

k. Planning and executing natural gas transactions for commodity and transportation to balance gas requirements.

l. Keeping accurate records of all transactions they enter.

10. Power Manager – Middle/Back Office

The Power Manager Middle Office will report to the RMC. The Power Manager Middle Office provides independent market and credit risk oversight. The Power Manager Middle Office is functionally and organizationally separate from the Front Office. The Power Manager Back Office reports to the Power Supply Analyst and provides support with a wide range of administrative activities necessary to execute and settle transactions and to support the risk control efforts (e.g. transaction entry and/or checking, data collection, billing, etc.) consistent with this Policy. The Power Manager Back Office is functionally and organizationally separate from the Front Office.

The Power Manager's Middle and Back Offices have primary responsibility for trading controls and for ensuring agreement between NLRED and its counterparties regarding the terms of all trades, including forward trading. Other duties associated with these responsibilities include:

a. Estimate and publish daily forward monthly power and natural price curves for a minimum of the balance of the current year through the next calendar year;
b. Calculate and maintain the forward power and fuel positions of NLRED;

c. Ensure that NLRED adheres to all risk policies and procedures of both NLRED and the Power Manager in letter and in intent;

d. Maintain the overall financial security of transactions undertaken by the Power Manager on behalf of NLRED; and

e. Implement and enforce credit policies and limits.

f. Handle confirmation of all power and natural gas trades (physical and financial) and reconciling differences with the trading counterparties;

g. Review trade tickets for adherence to approved limits, etc.

h. Ensure all trades have been entered into the appropriate Energy Trading and Risk Management (ETRM) System;
i. Ensure that both pre-schedule and actual delivery volumes and prices are entered into the physical database;
j. Carry out month-end checkout of all physical and financial transactions each month.
k. Review models and methodologies and recommend RMC approval to the Chief Financial Officer.
l. Forward all month-end settlement information to NLRED's Director of Power Supply or their designee.

III. General Requirements for Risk Management

A. Code of Conduct

All NLRED staff shall abide by the business ethics policies contained in NLRED's Personnel Policies and Procedures Manual. Employees shall not participate in any transaction or similar activity for the benefit of any party other than NLRED. In particular, no NLRED employee may engage in trading electricity, natural gas or related derivative instruments for their personal account, consistent with the ethical standards for local government employees in Arkansas.

B. Counterparty Suitability

Prior to the execution of any trade, the Power Manager's trading personnel will verify that the company represented by the contact they are dealing with is an authorized counterparty and check counterparty credit availability. No transaction may be executed without first following the approved procedures to ensure the transaction falls within the unutilized credit limit for the counterparty.

C. Contract Documentation

Transactions can only be made with parties with an existing approved agreement. The Power Manager may enter in to industry standard agreements such as an Edison Electric Institute (EEI), North American Energy Standards Board (NAESB), or an International Swaps and Derivatives Association (ISDA), or a master document that has been prepared and reviewed by the Power Manager's Contracts Department and NLRED's RMC including NLRED's Counsel.

D. Off-Premises Dealing

All transactions executed by the Power Manager Front Office shall be executed at the Power Manager's offices or at off-site locations established in accordance with the Power Manager's "Disaster Recovery Plan". The Power Manager may request approval from the RMC to authorize exceptions when deemed necessary to conduct business.

E. Transaction Recording

The Power Manager shall record all transactions in a commercially reasonable manner.

F. Online Trading

Online trading through authorized services is permissible within the limit structure and controls set forth in this Policy.

G. Policy Compliance

Before any transaction is executed, the individual executing is required to ensure that the transaction/product is approved and appropriate for the risk tolerance defined in this Policy. This requirement will be fulfilled by analyzing the transaction and its associated hedges to ensure that the resulting incremental credit and market exposures do not exceed the limits set forth in this Policy. The required analysis and review will vary depending upon the type of transaction and its inherent risks.

H. New Products

As markets evolve, NLRED may wish to approve new products for the purposes of hedging activities. The RMC is responsible for ensuring that each new product structure meets the following criteria prior to engaging in a new product transaction:

- All risks are identified and understood by the RMC and authorized trading personnel.
- Front office as well as support staff involved in transaction processing (confirmations, scheduling, settlements, and accounting) have received adequate training and demonstrate familiarity with the products.
- A system is in place for the revaluation and risk monitoring of each product.
- Accounting and tax policies associated with the product have been identified.

IV. Applicable Risks:

This Policy is intended to cover the management of all material risks faced by NLRED while participating in wholesale energy markets. Among the most critical of these risks are:

A. Credit or Counterparty Risk

Credit or Counterparty risk is the inability or unwillingness of a supplier or trading counterparty to perform in a bilateral transaction, including timely payment of invoices, delivery of commodity, and other contractual obligations. The Power Manager will manage counterparty risk through the Credit limit structure and controls set forth in this Policy.

B. Market/Commodity Risk

Market/Commodity Risk is the potential loss in the value of a transaction arising from changes in the market price of a commodity. Commodity risk is comprised of price risk, volatility risk, forward price risk, correlation risk and liquidity risk. These risks vary with product type, location and time. NLRED's exposure to market/ commodity risk will be managed by the Market limit structure and controls set forth in this Policy.

C. Process Risk

Process Risk is risk of financial and opportunity loss and legal liability attributable to process problems such as inaccurate data capture, untimely trade execution, and clearance and/ or settlement problems. NLRED will manage Process Risk by:

a. Understanding the Power Manager's formal procedures to detail the key business processes underlying NLRED's activities; and

b. Information systems that support the effective, accurate and efficient processing of approved transactions and flexible data access and reporting tools.

D. Liquidity Risk

Liquidity Risk is the risk that the market is constrained or limited with the potential inability to initiate or liquidate positions due to low trading volumes. NLRED will manage liquidity risk by conducting transactions in a manner that promotes market flexibility and minimizes exposure to illiquid conditions, consistent with the provisions of this Policy.Volume Risk

Volume Risk is the risk that supplies exceed requirements or requirements exceed supplies, creating an unplanned net resource excess or resource deficient position. NLRED will manage Volume Risk by:

a. Careful attention to those factors driving volumetric uncertainty (e.g. weather);

b. Establishing specific authorizations and limits on transactions; and

c. A risk control function that monitors compliance.

E. Operational Risk

Operational Risk is the risk that occurs when extreme load conditions and energy assets fail to perform as expected such as resource or transmission outages. NLRED will manage operational risk as follows:

a. Electric supply risk is managed by maintaining adequate planning resource margins and operating reserves.

b. Fuel supply risk is managed by owning or contracting for storage services and maintaining fuel supply inventories to assure continued operations under the majority of potential shortage conditions

c. Emergency action and customer curtailment plans are maintained to respond to emergency conditions.

F. Opportunity Risk

Opportunity Risk is the risk that occurs when NLRED fails to capitalize on market opportunities to reduce costs or increase revenues. Opportunity risk is managed through effective forecasting, planning and hedging mechanisms, including participation in the Day Ahead or Real Time energy markets.

G. Organizational Risk

Organization Risk is the risk that occurs when there are problems with internal processes such as unclear lines of authority, inadequate staffing, or a lack of clear accountability over specific deals. Organizational risk is managed through clear delegation and separation of duties and accountability of staff, both at NLRED and at NLRED's Power Manager. A system of checks and balances results from the division of responsibilities within the organizational structure.

H. Concentration Risk

Concentration Risk is risk that occurs when the overall spread of outstanding transactions is with a small number or types of counterparties. Concentration risk will be managed by the Power Manager with their ability to have a larger number of approved trading counterparties.

I. Regulatory Risk

Regulatory Risk arises from participating in regulated markets. With the Independent System Operator (ISO) implementation of Federal Energy Regulatory Commission (FERC) Order 741, NLRED faces increasing regulatory risk when participating in wholesale energy markets. To ensure compliance with applicable regulations related to commercial activities, regulatory risk is managed by:

a. Compliance training for all employees participating in regulated markets;

b. Integration of the appropriate compliance culture within the organization;

c. An independent monitoring of issues that could trigger an increase in regulatory risk.

V. Risk Measurements/Metrics

A. Market Risk Limits

A limit structure is essential to control the amount of risk in NLRED's portfolio. NLRED will manage and report on its market risk using volume, location and term/maturity/value limits. The NLRED Director of Power Supply and the Power Manager are responsible for ensuring that NLRED remains within these limits. The RMC may, from time-to-time, establish limits that are lower than the limits set forth in this Policy.

1. Volume Limits
   The total volume of hedged transactions may not exceed the volume of the hedgable commodity.

2. Locational Limits
   Transmission and Transportation transactions must support one of NLRED's generation units, native load or transaction locations.

3. Term/Maturity/Value Limits
   Transaction limits for the NLRED are listed below. Individuals authorized to execute transactions within the limits below may be delegated by the NLRED RMC and are contained in Appendix D. In addition to being subject to Credit Limits, transactions for amounts in excess of those listed may be executed only upon approval of the Council. This term, maturity and value structure is not intended for use when transacting day-ahead and real-time in the MISO market. Additionally, the NLRED RMC understands there are times when the value of a position may be uncertain until after the fact, for example MISO capacity that clears through an auction process, and when a position of this type exceeds the limit below the NLRED RMC will notify the City Council and this will not be considered a breach of the Policy.

Position	Maturity Limit	Term Limit	Notional Dollar Limit ($)
Risk Management Committee	72 Months	60 Months	$10,000,000

B. Exceedances of Market Risk Limits

In addition to the other notifications provided for herein, it shall be the responsibility of anyone that observes that NLRED has exceeded Term/Maturity /Value limits or any of the Net Position limits to notify the RMC of the status of NLRED's Net Positions for so long as NLRED is exceeding its limits. The RMC will review NLRED's Net Positions and determine whether any liquidation or offsetting of positions is warranted.

Should NLRED's Term/Maturity/Value limits, or Net Position exceed 150% of the limits set forth in the Policy, NLRED must liquidate enough of its Net Positions to bring it in compliance with the limits set forth in the Policy unless it has obtained the prior approval of the City Council, in which case NLRED must act within the limits established by the City Council.

C. Exceedances of Risk Limits during Emergency Operations

NLRED or Power Manager personnel involved in day-ahead or same-day trading activities may exceed their authorized trading or credit limits or the approved trading and credit limits for a counterparty if such actions are required, during a system emergency, to: (i) balance load and resources, (ii) avoid shedding NLRED customer load, (iii) avoid punitive energy imbalance charges, or (iv) if directed to make such transactions, for system reliability reasons, by the NERC Regional Security Coordinator or the appropriate RTO Coordinator. Under these conditions, the purchase or sale price of the associated power will not be a deciding consideration in executing these transactions. If NLRED or Power Manager executes trades under any of these circumstances, the Trader involved will inform the NLRED RMC Chairperson as soon as possible of the situation, followed up with an email memo that: (i) describes in detail the reason for the trading or credit exception, (ii) includes an estimate of the dollar amount of the credit exceedance, (iii) includes an estimate (at the time the action was taken) of the punitive penalties avoided and/ or (iv) an estimate of the avoided load loss. This email memo must be forwarded to the NLRED RMC Chairperson before the close of business or the end of the Trader's shift.

D. Risk Reporting

At a minimum, the Power Manager's Risk Control group and Credit group will prepare reports on a monthly basis, or as otherwise directed by the RMC. Such reports may include, but not be limited to the following report types:

- Trade Activity Report
- Credit Utilization Report
- Position Report, including Net Positions
- Mark-to-Market Report

E. Exception Reporting Process

The RMC will review all material exceptions to this Policy on an as-needed basis. The RMC will report all such material exceptions to NLRED's City Council if applicable.

VI. Credit Policy

NLRED shall follow the credit practices of the Power Manager as follows:

A. Counterparty Approval

The manager of the Power Manager's credit department will approve all counterparties for credit purposes and will maintain a listing of all approved counterparties, with the credit limits and authorized products for each.

B. Credit Analysis and Reporting

The Power Manager's credit analysts will perform a credit analysis, and the manager of the Power Manager's credit department or RMC will approve initial credit limits, changes to limits, and exceptions to limits for all counterparties. In establishing the credit limit, the anticipated transaction volume, duration/ maturity of expected transactions and potential future credit exposure (based on market volatility) will be considered.

The manager of the Power Manager's credit department will be responsible for the accuracy of credit reports that will be available to the Power Manager's marketers and traders so that counterparty suitability, credit limits and exposure can be checked prior to executing transactions. The manager of the Power Manager's credit department is responsible for monitoring credit exposure and notifying the RMC of any exceptions.

C. Credit Limits

Required Credit Review

The manager of the Power Manager's credit department will establish a dollar volume credit limit for each trading counterparty, not to exceed $5,000,000. No transactions may be executed until a credit analysis has been performed and a credit limit has been established.

VII. Policy Distribution, Counsel, & Revision

A. Required Acknowledgements

All RMC committee members participating in the activities or transactions covered by this Policy shall sign a statement approved by the RMC that they (i) have read this Policy and any other applicable policies, processes, or procedures, (ii) understand this Policy and the related policies, processes, and procedures, and (iii) have and will continue to comply with this Policy and the related policies, processes, and procedures. The signed acknowledgement document will be maintained by the RMC.

B. Duty to Report Violations

Any employee that observes a violation of this Policy is required to promptly report such violation to NLRED's RMC Chairperson or General Manager.

C. Designated Counsel

Questions about the interpretation of any matters of this Policy should be referred to NLRED's General Manager, who will also provide clarification and explanation on any updates to the Policy. If there are further interpretation concerns, the issue should be brought to the attention of the NLRED's City Attorney.

Appendix A - Definitions

The following definitions shall apply throughout this policy and any references to this policy shall include these definitions. Additional definitions may be found in the Business Practice Manuals (BMPs) of the Midcontinent Independent System Operator (MISO).

1) Back Office - That part of an organization that handles transaction accounting, confirmations, management reporting, and working capital management.

2) Book- A set of forward transactions that each match criteria defined by the Book Structure.

3) Book Structure - The organizing principle according to which a portfolio is divided into a set of books for management and reporting.

4) City – The City of North Little Rock, Arkansas, a political subdivision of the State of Arkansas organized as a City of the First Class with a mayor/council form of government.

5) City Council – The governing body of persons duly elected to, *inter alia*, manage the finances and risk of the City.

6) Commodity - A basic good used in commerce that is interchangeable with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade.

7) Derivative- A financial instrument derived from a cash market commodity, futures contract or other financial instrument. Derivatives can be traded on regulated exchange markets or over-the-counter. For example, energy futures contracts are derivatives of physical commodities and options on futures are derivatives of contracts.

8) Director of Power Supply – The NLRED employee whose responsibilities include the procurement of wholesale electric power, and related risk management products, consistent with this Risk Management Plan and the RMC.

9) Forward Position – That portion of a specific transaction that has been fully hedged or matched-up back-to-back within the Portfolio; a portfolio-wide market/price risk is created.

10) Front-Middle-Back Office Model - A framework for organizing trading and risk management activities into independent areas that implement a series of "checks and balances" to ensure accurate information flow and manage operational risk.

11) Front Office- That part of an organization that solicits customer business, services existing customers, executes trades and ensures the physical delivery of commodities.

12) Futures Contract - A standardized contract which is traded on an organized exchange, for delivery in the future of a specified underlying asset.

13) Hedging Transaction - A transaction designed to reduce the risk of a specific outstanding position or portfolio; "fully hedged" equates to complete elimination of the targeted risk and "partially hedged" implies a risk reduction of less than 100%.

14) Mark-to-Market - To mark-to-market is to calculate the value of a financial instrument or commodity (or portfolio of such instruments and commodities) at current market rates or prices rather than the amount it was originally purchased or valued. Marking-to-market on a daily (or more frequent) basis is often recommended in risk management guidelines.

15) Maturity- The time between the date a transaction is executed to the last date that power or gas will flow (in the case of physical transactions) or be settled financially (in the case of financial transactions).

16) Middle Office- That part of a trading organization that measures and reports on market risks, develops risk management policies and monitors compliance with those policies, manages contract administration and credit, and keeps management and the Risk Management Risk Committee informed on risk management issues.

17) North Little Rock Electric Department (NLRED) – The City department functionally responsible for providing electricity to all customers in a reliable, affordable and responsible manner.

18) Open Position- That portion of a specific transaction that has not been fully hedged or matched-up back-to-back within the Portfolio; a portfolio-wide market/price risk is created.

19) Option- The right but not the obligation to buy or sell an asset at a specified price for a specified period of time.

    a) OTC: Over the Counter

        1. Physical: The asset is a commodity that is deliverable.

        2. Financial: The asset is a cash settled product.

    b) Exchange-Traded Option: An option traded and cleared on an organized securities or derivatives exchange.

        1. A Call Option gives the buyer of the option the right but not the obligation to buy the underlying asset at a specified at a specified time in the future. The seller has the obligation to provide the underlying asset if the option is exercised

        2. A Put Option gives the buyer of the option the right but not the obligation to sell the underlying asset at specified price at a specified time in the future. The seller has the obligation to take the underlying asset if the option is exercised.

20) Portfolio - A collection of transactions which may or may not be subdivided into Books.

21) Power Supply Analyst – The NLRED employee whose responsibilities include calculating and reporting the cost of power, and recommending rate adjustments to the RMC.

22) Power Manager - An energy trading and risk management entity hired by NLRED to manage its energy supply and the associated costs and risks.

23) Swap - An agreement between parties to exchange future cash flows according to a formula developed in advance.

    a) Fixed for Floating: buy/ sell fixed price and sell/buy some floating index

    b) Heat Rate: buy/ sell a fixed heat rate and sell/buy a floating heat rate

    c) Swing: buy/ sell either fixed price or some floating index and sell/buy some floating index

24) Term - The total duration of a contract defined as the number of days between the beginning flow date and ending flow date, inclusive.

25) Volatility - A measure of the variability of a market factor, most often the price of the underlying instrument.

Appendix B - Approved Products and Instruments

All commodity and financial products are subject to the limits in this Policy

Commodities:

Physical

Physical Power Products

Energy Commodity Product
Physical OTC Option
Power Capacity
Power Capacity Option

Physical Fuel Products

Natural Gas Commodity
Coal Commodity
Diesel Oil Commodity
Physical OTC Option
Transportation
Natural Gas Capacity

MISO Products

Capacity
Day-Ahead Energy
Real-Time Energy
Financial Transmission Right/Auction Revenue Rights
Virtual Transactions
Operating Reserves and Ancillary Services
Energy Tags (into and out of the MISO footprint)
Financial Schedules
Zonal Resource Credits (ZRC)

Financial Assets:

Financial Power Products

Any of the instruments listed below or any combination thereof that has electric energy as the underlying commodity, and which: (a) is customarily settled financially, and (b) the primary intent of which is to settle financially. This excludes RTO Products classified as Swaps for ISOs that have petitioned and been approved by FERC in the CFTC RTO Final Order.

Heat Rate Swap
Financial OTC Options
Cleared Futures Contracts
Cleared Options on Futures Contracts

Financial Natural Gas Products

Any of the instruments listed below or any combination thereof that has natural gas as the underlying commodity, and which: (a) is customarily settled financially, and (b) the primary intent of which is to settle financially.

Cleared Futures Contracts
Fixed for Floating Swap

Float for Floating Swap
Swing-Swap
Heat Rate Swap
Cleared Options on Futures Contracts
Financial OTC Options

Financial Crude Oil and Refined Products

Any of the instruments listed below or any combination thereof, that has crude oil, residual fuel, or distillate as the underlying commodity, which: (a) is customarily settled financially, and (b) the primary intent of which is to settle the transaction financially.

Cleared Futures Contracts
Fixed for Floating
Cleared Options on Futures Contracts
Financial OTC Swaps

Appendix C - Authorized Regions

An authorized region is a geographical area in which the RMC can transact. This applies to any commodity the RMC is purchasing. Authorized regions shall be established by the RMC.

Appendix D - NLRED RMC Delegations

The NLRED RMC may delegate transactional authority to the Director of Power Supply and the Power Manager up to specified limits, subject to all limits contained in the Policy. Delegations will be reported to City Council according to the following format:

Name	Term	Maturity	Volume	Value
Director of Power Supply				
Power Manager				