



PUBLIC POWER FOR KENTUCKY

# Enterprise Risk Management Policy







## KYMEA Enterprise Risk management policy

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## SECTION 1.1

### KYMEA ENTERPRISE RISK MANAGEMENT POLICY

#### Policy Purpose

The purpose of this document is to formalize the policies of Kentucky Municipal Energy Agency (“KYMEA”) regarding managing its enterprise-wide risks (“Enterprise Risks”). Accordingly, this Policy will set forth KYMEA’s:

- risk management objectives;
- identification of Enterprise Risks governed by this policy;
- definition of risks;
- guidelines for the management of each identified risk; and
- risk governance structure and responsibilities.

KYMEA intends that risk management will support the advancement of its strategic business plan, and will properly manage its business and financial risks through:

- prudent oversight;
- adequate mitigation of risks consistent with KYMEA’s defined risk tolerance; and
- effective internal controls and procedures.

The KYMEA Enterprise Risk Management Policy, (the “Risk Management Policy”) will outline the fundamental guidelines for the management of each risk identified. Administrative controls and operating procedures needed to effectively implement the Risk Management Policy will be documented in the Administrative and Operating Procedures (the “Procedures”) provided for by the Policy.

## SECTION 1.2

### **STRATEGIC PLANNING PROCESS**

Managing the Enterprise Risks of KYMEA's business entails the strategic planning of resources and activities among all departments within KYMEA.

KYMEA will develop a strategic planning process that identifies and addresses strategic issues, high priority risks, and gaps in the Enterprise Risk management framework. The strategic planning process will be utilized to identify and anticipate strategic issues and risks, understand the assumptions, quantify these risks, and enable KYMEA to develop and implement effective strategies to address them.

## SECTION 1.3

### RISK MANAGEMENT OBJECTIVES

KYMEA exists primarily to provide cost-effective resources and services for the benefit of its members to enable them to achieve objectives they have set for themselves more efficiently and at lower costs than they could achieve individually. Managing KYMEA's Enterprise Risk is consistent with that goal, and serves the following objectives:

- maintain risk within desired tolerances for a defined period in the future;
- mitigate price volatility to the members;
- maintain financial liquidity within desired tolerances;
- maintain an investment grade credit rating;
- comply with all regulatory and reliability requirements;
- protect KYMEA from and improve its resilience to physical and cyber security threats;
- reduce business interruptions and limit associated impacts;
- enhance the value of KYMEA's assets/resources;
- leverage opportunities to increase the value of KYMEA to its members;
- participate in commodity markets and derivative instruments for hedging and not for speculative purposes; and
- develop an Enterprise Risk Management ("Risk Management") culture throughout the organization and provide for an ongoing strategic planning process.



## SECTION 1.4

### ENTERPRISE RISKS GOVERNED BY THIS POLICY

The scope of this policy is to address KYMEA's Risk Management in three primary categories, Business Operations Risks, Energy Risks, and Financial Risks. The primary risks are described below.

#### 1. Business Operations Risks

- a. **Operational risk** is the risk of loss from inadequate or failed internal processes, people, and systems.
- b. **Contract Counterparty performance risk** is the risk of a counterparty's failure to operationally perform on an agreement, particularly where contractual provisions leave KYMEA with little or no recourse upon an event of default by the counterparty.
- c. **Facility Operations risk** is the risk associated with power generation and delivery physical assets. This would include failures or outages associated with generation units, fuel delivery systems (weather or mechanical), generation step-up transformers, the transmission system, control systems, or other critical components associated with the production or delivery of electricity.
- d. **Physical and cyber security risk** is the risk to physical assets and information systems resulting from physical or cyber-attacks.
- e. **Business interruption risk** is the risk that a business is interrupted and will not be able to continue operations on either a short term or long-term basis.
- f. **Regulatory compliance risk** is the risk associated with failing to comply with local, state and federal regulatory requirements.
- g. **Reliability compliance risk** is the risk associated with failing to comply with reliability requirements, specifically NERC reliability standards, including Critical Infrastructure Protection ("CIP") Standards. These risks include financial penalties; costs associated with mitigating non-compliance and legal fees associated with enforcement; and reputational losses.

#### 2. Energy Risks

- a. **Commodity market price risk** is the risk of loss due to potential fluctuations in the prices of an underlying energy commodity. In the wholesale power market, KYMEA has risk that commodity prices rise, spike or are generally high when it is dependent on the market to meet its firm supply obligations. KYMEA has risk that prices fall or are generally low when it has excess capacity or electric energy compared to its firm supply obligations. Commodity market price risk occurs across all tenors, from the hourly market to the long-term forward market (5 + years ). KYMEA is exposed to commodity price risk for power, coal, natural gas, fuel oil and various bulk materials (e.g. ammonium, limestone) that exhibit price volatility.

- b. **Contract Counterparty performance risk** is the risk of a potential adverse occurrence of a counterparty's ability to operationally perform on an agreement or due to contractual provisions that leave KYMEA with no recourse under an event of default.
- c. **Concentration (lack of diversity) risk** is the risk of having large exposures to significant power supply components. Concentration risk can be found with suppliers (contract and credit risk), generation units (outage risk), unit technology (environmental) and native load customers. This includes the risk of reliance of a single fuel commodity, reliance on a single technology for electric generation, or a geographical concentration of resources that would create delivery exposure due to damage to physical generation and transmission assets due to storm, accident, vandalism, or sabotage.
- d. **Delivery risk** is the risk that KYMEA cannot meet a firm supply obligation due to a transmission constraint. Ability to deliver is essential to KYMEA in meeting its firm supply obligations and reliability of service.
- e. **Forced outage and de-rate risk** is the risk that a generating unit does not perform when it is expected to be available, or when it performs below expected capability. Since this risk can result in KYMEA being unintentionally short in the market, it also can contribute to market price risk. KYMEA can also be exposed to delivery risk in the transportation of its fuel supply that can result in unit unavailability or de-rate types of risk.
- f. **Volumetric risk** is the risk that energy commodity volumes will vary from expected and result in a potential loss due to unfavorable commodity market prices. The primary volumetric risks that KYMEA is exposed to are load forecast/ weather variability risk, and loss of load.
  - i. **Load forecast/weather variability risk** is the risk that actual loads differ from forecasted loads due to inherent uncertainty in weather forecasts and load forecasts. This risk is natural to KYMEA's portfolio since it serves load serving entities. Since this risk will result in KYMEA being unintentionally long or short in the spot market, it can contribute to hourly market price risk.
  - ii. **Loss of load risk** is the risk that KYMEA loses a significant portion of its load and the market price for electricity concurrently falls below the sales price for the lost load, thereby creating a financial strain on the agency. However, if market prices for electricity are higher than the sales price for the lost load, it would create a financial benefit to the agency.
- g. **Environmental Emission Allowances risk** is the risk that KYMEA will not have sufficient environmental emissions allowances to assure compliance with the United States Environmental Protection Agency emission limits at a reasonable cost.
- h. **Renewable Energy Attributes risk** is the risk that, if a mandated renewable energy standard is implemented, KYMEA may not have sufficient quantities of Attributes necessary to comply with the standard. In the absence of a mandatory standard, this

risk is primarily the failure to capture the financial benefit to KYMEA from selling and trading renewable energy attributes that have been allocated to KYMEA.

### 3. Financial Risks

- a. **Financial risk** is the risk that the agency's scarce resources are not optimally employed, resulting in adverse financial consequences. Quantification of risks in terms of their impact on financial measures will be considered in risk analysis and mitigation. Risk quantification and mitigation pursuant to appropriate risk tolerance shall have significant focus.
- b. **Cash margin risk** is the risk associated with inadequate cash flow resulting from margin requirements of a contractual agreement. For example, the EEI Master Agreement provides that counterparties may margin each other when they are overexposed above credit thresholds that were negotiated between the parties when the agreement was executed. Credit exposures include replacement cost exposure on a mark-to-market basis when a counterparty's position is out-of-the money.
- c. **Credit risk** is the risk of a counterparty's inability to pay its obligations (debts) to KYMEA or of a supplier that declares bankruptcy and abrogates a supply contract that must be replaced during a time of higher commodity market prices.

## SECTION 1.5

### RISK MANAGEMENT GOVERNANCE STRUCTURE

Governance of KYMEA's Risk Management ("Risk Management Governance") will follow a top-down approach whereby the Board of Directors ("Board") identifies KYMEA's Risk Management objectives and provides Risk Management oversight. Supporting controls, policies and procedures will be implemented and aligned throughout the Risk Management Governance structure, with distinct roles and responsibilities that result in a risk control environment. Governance and controls include the organizational structure, policies, reporting process and procedures that support KYMEA's business model, risk tolerance, power supply objectives, financial objectives, and reliability objectives and segregate responsibilities appropriately.

The roles of the Board, Board Risk Oversight Committee (the "BROC"), and Internal Risk Committee (the "IRC") are outlined as follows.

#### 1. KYMEA Board

- a. Establish and communicate the Board's acceptable levels of risk tolerance.
- b. Approves KYMEA's Risk Management Policies:
  - i. Business Operations Risk Management Policy
  - ii. Energy Risk Management Policy
  - iii. Financial Risk Management Policy.
- c. Approve updates to these policies as may be recommended by the Board Risk Oversight Committee
- d. Receive and approve no less than annually, reports from the Board Risk Oversight Committee on the status of risk management activities and risk mitigation measures in place specific to;
  - i. Business Operations Risks
  - ii. Energy Risks
  - iii. Financial Risks
- e. Approve the initial Risk Management Procedures ("Risk Management Procedures") for KYMEA's Business Operations, Energy, and Financial activities
- f. Receive periodic updates on KYMEA's risk profile.

#### 2. Board Risk Oversight Committee (the "BROC")

- a. Comprised of five voting members as follows:
  - i. Board Member (Director or Alternate Director)

- ii. AR Project Committee Member
  - iii. CEO
  - iv. CFO
  - v. Legal Counsel
- b. Monitors the activities of the IRC to ensure compliance with the Enterprise Risk Management Policy;
  - c. Receives and reviews from the Internal Risk Committee quarterly Risk Management reports on Business Operations, Energy, and Financial activities;
  - d. Reports annually on the Risk Management activities and results to the KYMEA Board;
  - e. Reviews and recommends changes of the Risk Management Policies to the KYMEA Board as it deems appropriate.

Subsequent to the initial Board approval of the Risk Management Procedures, the BROCC will be responsible for approving future revisions to the Risk Management Procedures submitted by the Internal Risk Committee for consideration.

If recommended revisions to Risk Management Procedures represent a material change that could impact policy guidelines, the BROCC will submit the revisions to the Board for consideration along with any affected policy provisions.

Chairman of BROCC or CEO can call a meeting of BROCC at any time based on any concerns regarding compliance with or implementation of the Enterprise Risk Policies.

### **3. Internal Risk Committee (the "IRC")**

- a. The IRC shall be formed upon the approval of this Enterprise Risk Management Policy by the Board.
- b. The IRC shall have four members as follows:
  - i. President and CEO ("CEO"), who shall serve as Chairperson of the IRC
  - ii. Vice President of Market Analytics
  - iii. Chief Financial Officer ("CFO")
  - iv. Outside Counsel
- c. The Chairperson of the IRC shall schedule meetings at least quarterly.
- d. The IRC shall approve each strategy and hedge recommendation prior to the commencement of the implementation of the recommendation. The approval shall specifically include the following:
  - i. Purpose of the strategy or hedge;
  - ii. Strategy or Hedge instruments to be used;

- iii. Duration of the strategy or hedge; and
  - iv. Desired results of the strategy or hedge.
- e. The IRC shall
  - i. Develop the Risk Management Procedures for Business Operations, Energy and Financial Management activities, which shall specify the detailed procedures and reporting necessary to implement this Enterprise Risk Management Policy;
  - ii. Maintain these Risk Management Procedures and recommend any revisions deemed necessary or appropriate to the BROC for approval;
  - iii. Monitor staff and service provider compliance with the Risk Management Procedures;
  - iv. Approve all individuals authorized to execute trades (At a minimum, the CEO and Vice President of Market Analytics shall be authorized to execute trades.);
  - v. Approve all brokerage relationships and all ISDA and EEI agreements and any other contractual agreement relating to Energy activities;
  - vi. Establish requirements to determine counterparty creditworthiness prior to any proposed OTC transaction;
  - vii. Review counterparties at periodic intervals to ensure they have maintained compliance with the requirements; and
  - viii. Develop a detailed position reporting system to assess the performance of each executed strategy or hedge recommendation relative to the approved objectives.
- f. Each IRC member is authorized to call committee meetings beyond those scheduled quarterly, and each has responsibility to ensure that all activities are in accordance with the Enterprise Risk Management Policy.
- g. The IRC may meet in person, through telephone or electronic conference calls, and using electronic mail. The IRC will keep regular minutes and records of its meetings and actions.
- h. At any time, if any IRC member believes that the committee has failed to adequately address a situation in which the member believes price or credit speculation is taking place, that member will submit a written statement describing the concern to the Chairperson of the BROC.

## SECTION 1.6

### BUSINESS OPERATIONS RISK MANAGEMENT POLICY

- a. Operational risk will be managed by ;
  - i. Recruiting and hiring of qualified individuals for each of the staffing positions authorized by the KYMEA Board
    - 1. CEO will provide organizational recommendations, staffing recommendations and detailed job descriptions for critical positions to the Board for authorization
    - 2. Background checks, drug testing, and safety procedures will be established and outlined in the Business Operations Risk Procedures
    - 3. Recruiters for critical management positions may be used when appropriate
  - ii. KYMEA will designate Authorized Persons, persons authorized to disburse funds, negotiate loans, and deposit funds
  - iii. KYMEA has adopted and will operate its procurement functions consistent with the provisions of KRS Sections 45A.345 to 45A.460 of the Kentucky Model Procurement Code for the purpose of providing KYMEA with rules, guidelines and provisions for the procurement of goods and services
    - 1. CEO will be responsible for maintaining compliance with the Kentucky Model Procurement Code
    - 2. Specific procurement processes and procedures will be documented in the Business Operations Procedures and will be periodically reviewed by outside counsel and specifically reviewed prior to initiating major procurement activities (RFP's)
  - iv. The periodic review and refinement of Business Operations, Energy, and Financial Procedures and their included reporting functions
  - v. The use of third party review of business operations, including but not limited to municipal financial advisors, external auditors, and other applicable independent third party service providers
- b. Counterparty performance risks will be managed according to the Energy Risk Management Procedures and supporting Energy Service Provider's trading control procedures.
- c. Facility operations risk will be managed as follows;
  - vi. Generation risk will be managed consistent with the Forced Outage and Derate risk management provisions outlined in the Energy Risk Policy

- vii. Transmission risk will be managed consistent with the standards of KYMEA's transmission service providers and regulated market requirements
- viii. Distribution level risk will be managed by each Member for its own system
  - 1. KYMEA will assist with the review of standards, inspections, and procurement when requested by a Member and when opportunities for economy of scale can be achieved.
- d. Physical and cyber security risks will be managed as follows;
  - i. Physical security will be address through coordination with local law enforcement and fire prevention authorities
  - ii. KYMEA will utilize industry standard alarm, monitoring, surveillance and key control systems to protect critical physical facilities and their contents
  - iii. KYMEA will utilize password protection, multiple and remote backup of computer systems and data consistent with industry standard practices
    - 1. KYMEA will utilize remote off site Microsoft Office 365 or equivalent security protection and will investigate the use of additional third party data backup where appropriate
    - 2. KYMEA will install and utilize malware protection software on all computer systems including portable laptops and mobile devices
  - iv. Additional processes and procedures will be outlined in the Business Operations Procedures as required
- e. Business interruption risk will be managed as follows;
  - i. KYMEA will maintain the capability of performing its functions from multiple locations with geographic diversity to avoid regional threats or impacts
    - 1. This can be achieved by maintaining multiple locations, portability of functions, or the use of third party backup such as from the Energy Service Provider facilities
    - 2. Additional procedures where advisable will be incorporated in the Business Operations Procedures
- f. Regulatory compliance risk will be managed as follows;
  - i. KYMEA will designate a Responsible Officer to oversee compliance with all regulatory requirements applicable to KYMEA
  - ii. Regulatory compliance will be periodically reviewed by KYMEA outside counsel at least on an annual basis or when new regulations applicable to KYMEA's functions are instituted
  - iii. Emissions allowance and renewable energy attributes regulatory requirements will be managed as outlined in the Energy Risk Management policy



- iv. KYMEA may use additional outside counsel that specialize in particular types of regulatory requirements where deemed appropriate
  - v. The specific procedures related to these functions will be outlined in the Business Operations Procedures
- g. Reliability compliance risk will be managed as follows;
  - i. KYMEA will periodically update the forecasts for its load serving obligations and compare these forecasts to the capacity procured by KYMEA to meet these forecasted needs.
  - ii. KYMEA will generally seek to meet a planning capacity reserve margin in accordance with applicable reliability region standards.
  - iii. The actual targeted reserve margin will be managed through long term generation additions and short, intermediate, and long term purchased power contracts based upon the cost and risk tradeoffs of KYMEA.
  - iv. The specific procedures related to these functions will be outlined in the Business Operations Procedures

## SECTION 1.7

### ENERGY RISK MANAGEMENT POLICY

#### 1. Fundamental Concepts

- a. KYMEA operates its power supply function under a different business model than merchant energy companies, and therefore has a different risk profile, requiring a different approach to risk management.
- b. KYMEA by nature has significant volumetric risk that results from: 1) long-term load serving obligations, 2) the supply hedges used to meet those obligations (generation, forwards, options, etc.), and 3) the volumetric differences that occur between numbers 1 and 2 (“unmatched positions”).
- c. Typical derivative risk metrics, such as Value at Risk (VaR), do not factor in volumetric risk, and are therefore inadequate to reflect the full risk that is inherent to KYMEA’s business.
- d. Native load does not behave according to any derivative that can be loaded into a risk management system. The proper risk measurement and decision support tool for most of KYMEA’s risks is a risk model that incorporates both market price risk and volumetric risk together, and provides for a correlation of native load demand to market prices

#### 2. KYMEA will:

- a. Utilize energy risk management tools to provide competitive and stable priced, reliable electric service to its member communities;
  - b. Participate in the forward term electric market *defensively* to hedge the risk of its forward load serving obligations (short positions) based on monthly or seasonal forecasted peak loads, plus a capacity planning reserve;
  - c. KYMEA also has forward positions that are net long after meeting its firm load obligations;
  - d. Participate in the weekly/daily/hourly electric market to balance its unmatched positions at the market price in real time, and to respond in the near-term timeframe to predictable weather trends; and
  - e. Participate in both the short-term and long-term energy markets to hedge its anticipated fuel consumption, financially or physically, and to supply fuel to its generation units.
3. For short and intermediate term planning, market price risks and volumetric risks will be managed in the near-term planning cycle (1-60 months forward) utilizing a portfolio model.
  4. For long term planning, market risks and volumetric risks will also be managed utilizing an Integrated Resource Plan for a period of 6-20 years. KYMEA will forecast its long-term firm

supply obligations based on its expectations for load growth. This tool, along with the short/intermediate term portfolio model will assist KYMEA in making appropriate capital investments and long-term contractual commitments to serve the needs of its members.

5. KYMEA will not:

- a. Utilize energy risk management tools to trade speculatively (buy low – sell high), or to initiate energy risk positions;
- b. Take at-risk positions in merchant generation; or
- c. Engage in the practice of mark-to-market revenue recognition, considering that rates to KYMEA's members are cost-based, without variability for mark-to-market fluctuations.

6. The Energy Risk Management Policy will govern the management of Energy Risks identified above under Definitions of Risk using procedures included in the Energy Risk Management Procedures within the limits stated below.

- a. **Commodity market price risk** will be managed according to trading authority limits to conduct market transactions. The trading authority limits to conduct commodity market transactions are approved by KYMEA Board and are included in the Energy Risk Management Procedures. KYMEA will also manage its commercial operational risks to new products, instruments, or locations according to a control process for such as found in the Energy Risk Management Procedures.

- i. Hedge instruments will be used to manage commodity price risk, concentration risk, and volumetric risk consistent with the Energy Risk Management Procedures and supporting internal execution strategies and control procedures.
- ii. Numerous transactions may be entered into to mitigate risk consistent with the Board approved power supply cost goals and risk tolerance. Several hedging instruments and commodities are used to manage KYMEA Enterprise Risks, which include purchases or sales of physical commodities, financial instruments, power transmission, and power generation capacity.
- iii. The IRC may hedge up to 100% of the expected volumes of individual fuel types at the time of execution within the Financial Limits listed below.
- iv. Financial Limits. The maximum exposure of open financial (all futures, options, and OTC) instruments expressed as the total gross current market value ("notional value") of outstanding financial positions under this Policy shall not exceed a percentage of the annual fuel component (including fuel costs of KYMEA owned generation and identified under PPAs) of the energy procurement budget as follows:

- 1. 1<sup>st</sup> Year - 40% of approved annual fuel component of energy budget

2. 2<sup>nd</sup> Year budget - 35% of forecasted annual fuel component of energy budget
  3. 3<sup>rd</sup> Year budget - 30% of forecasted annual fuel component of energy budget
  4. 4<sup>th</sup> Year budget - 25% of forecasted annual fuel component of energy budget
  5. 5<sup>th</sup> Year budget - 20% of forecasted annual fuel component of energy budget
- v. Authorization. For the management of commodity market price risk, the following are the only financial instruments that are authorized for use to conduct these energy risk management activities:
1. Futures Contract - A standardized binding agreement to buy or sell a specified quantity or grade of a commodity at a later date. Futures contracts are freely transferable, can be traded exclusively on regulated exchanges and are settled daily based on their current value in the marketplace.
  2. Option - A contract which gives the holder the right, but not the obligation, to purchase or sell the underlying futures contract at a specified price within a specified period of time in exchange for a one-time premium payment. The contract also obligates the writer, who receives the premium, to meet these obligations.
  3. Over-the-Counter Instruments (OTC) - Any financial or physical instrument that is customized and created by a counterparty to replicate the risk profile associated with a commodity.
- b. Counterparty performance risk will be managed thru monitoring of the counterparty obligations and default provisions of PPAs, bilateral transactions, or service contracts. Counterparty credit risk will be managed under the Financial Risk Management Policy.
- c. Concentration (Lack of Diversity) risks will be managed by diversifying the Agency's supply resources and its energy (fuel and power) purchase requirements based upon the diversification requirements to avoid excessivereliance on:
- i. A single fuel commodity;
  - ii. A single supplier;
  - iii. A single technology; or
  - iv. A single geographic location or area.
- Specific diversification requirements will be outlined in the Energy Risk Management Procedures.
- d. Delivery risks will be managed by:

- i. Procuring firm electric transmission rights as outlined in KYMEA's Energy Risk Management Procedures; and
  - ii. Evaluating the fuel transportation methods utilized by PPA suppliers and by evaluating the procurement of firm gas transmission rights for PPA's that allow KYMEA the option to deliver its own fuel.
- e. Forced outage or derate risk will be managed:
  - i. Through the negotiation and enforcement of availability guarantees in KYMEA's PPA's and their associated cost of cover requirements;
  - ii. For self-owned and operated assets, using prudent utility practice in the development and management of KYMEA's operations and maintenance procedures as outlined in the Energy Risk Management Procedures; and
  - iii. By working further with the Board to establish any maximum levels of financial expenditures to be made for replacement power to avoid interrupting KYMEA's firm power supply obligations and the criteria for interruption should these financial limits be exceeded.
- f. Volumetric risk (load forecast/weather variability and loss of load risk) will be managed by:
  - i. Limiting long-term positions relative to projected capacity requirements; and
  - ii. Appropriate management of hourly market price risk.
- g. Environmental Emission Allowances risk will be managed by KYMEA or its counterparties by buying, selling or trading emission allowances to assure compliance with the United States Environmental Protection Agency emission limits.
  - i. KYMEA will not purchase, sell or trade emission allowances for speculative purposes.
  - ii. KYMEA will maintain a sufficient quantity of allowances necessary to comply with emissions limits relative to its forecasted generation.
  - iii. KYMEA may execute, purchase, sell or trade transactions to achieve the level of emission allowances needed.
  - iv. KYMEA will calculate emission allowance needs based on the following:
    - 1. Forecasted emissions;
    - 2. Allocated emission allowances; and
    - 3. Risk management factor of 20% of forecasted emission allowance needs.
  - v. Written approvals by the Vice President of Market Analytics and the CEO (or other individual responsible for environmental compliance, i.e., the "Responsible Officer") must be obtained before any emission allowance transaction is valid and entered into for KYMEA. Documentation of all analysis

and calculations will be provided to the IRC for review prior to approval.

- vi. All emission allowance transactions will be documented by an agreement signed by authorized representatives of all parties.
- vii. On a quarterly basis an Environmental Emission Allowance report including current balances and actual consumption along with forecasted consumption and future balances will be provided to the IRC.
- h. Renewable Energy Attributes risk will be managed by KYMEA or its counterparties by buying, selling or trading Renewable Energy Attributes to provide financial benefit to KYMEA and to assure compliance with any applicable regulations or standards that may be implemented.
  - i. If a mandatory renewable energy standard is implemented, KYMEA will maintain sufficient quantities of Attributes necessary to comply with the standard.
  - ii. The Vice President of Market Analytics or Responsible Officer will have responsibility for maintaining KYMEA's Renewable Energy Attributes inventory from all sources and making recommendations to hold, buy, or sell such attributes. Renewable Energy Attribute sources may include, but are not limited to landfill gas, solar, wind, biomass, and other generation sources.
  - iii. On a quarterly basis the Vice President of Market Analytics or Responsible Officer will report to the IRC Committee regarding KYMEA's Renewable Energy Attributes inventory and make a recommendation to hold, buy or sell such attributes. If a recommendation to buy or sell such attributes is made, the Responsible Officer will provide all necessary documentation for consideration by the IRC.
  - iv. Written approvals by the Vice President of Market Analytics and CEO must be obtained before any Renewable Energy Attributes transaction is presented to IRC. Once this approval is obtained, documentation of all analysis and calculations will be provided to the IRC, and a request for IRC approval of the transaction will be requested.
  - v. All Renewable Energy Attributes transactions will be documented by an agreement signed by authorized representatives of all parties.

## 7. Internal Controls

- a. In addition to the authorization of acceptable instruments, limits, and credit standards, a segregation of departmental responsibilities shall be established to verify and reconcile the adherence of KYMEA's activities to its Enterprise Risk Management Policy.
- b. The Risk Management Procedures shall specify a clear separation between transacting, credit review and approval, margining and cash settlements, and accounting.

## 8. Conflicts of Interest

- a. Personnel responsible for executing and managing KYMEA's trading activity will not engage in nor give the appearance of engaging in personal business activity that could conflict with the proper execution of the Energy Risk Management Policy or which could impair their ability to make impartial decisions regarding energy activities. These personnel shall disclose to the CFO any material financial interests in financial institutions or other entities that conduct business with KYMEA, and they shall further disclose any material personal investment positions that could be related to the performance or financial health of KYMEA.

## 9. Policy Review

- a. At least once during the first 12 months following approval of this Enterprise Risk Management Policy and on an annual basis subsequently, the IRC will review the Enterprise Risk Management Policy and will make a recommendation to the BROC on the adequacy of the Enterprise Risk Management Policy and any changes which should be considered.
- b. Any recommended changes to the Enterprise Risk Management Policy will be brought to the KYMEA Board by the BROC for consideration and approval.

## SECTION 1.8

### FINANCIAL RISK MANAGEMENT POLICY

1. The purpose of the Financial Risk Management Policy is to assure KYMEA remains capable of maintaining a strong financial base sufficient to sustain KYMEA's services to its members by:
  - a. Maintaining sufficient cash reserves to allow the routine assessment of potential current and future financial impacts related to the services KYMEA provides to its Members and make necessary adjustments to avoid adverse financial consequences
  - b. Managing its finances consistent with prudent utility practice and GAAP
  - c. Maintaining an excellent credit rating as determined by one or more credit rating agencies to assure Members that KYMEA is operated in a sound and prudent fiscal manner.
2. The Financial Risk Management Policy will govern the management of Financial Risks identified above under Definitions of Risk using procedures included in the Financial Risk Management Procedures to address the risks stated below.
  - a. **Financial risk** is the risk that KYMEA's scarce resources are not optimally employed, resulting in adverse financial consequences. Quantification of risks in terms of their impact on financial measures will be considered in risk analysis and mitigation. Risk quantification and mitigation pursuant to appropriate risk tolerance shall have significant focus.
    - i. KYMEA will prepare and approve an annual budget prior to the start of each fiscal year. The budget will include a projection of revenues and expenditures including operating expenditures and planned capital expenditures.
    - ii. KYMEA will establish and maintain rate schedules that provide revenues sufficient to meet all expected costs including operations, administrative and general, debt service, reserve funds, and margins needed for creditworthiness requirements.
    - iii. KYMEA will maintain expenditure categories consistent with applicable statutes and, where appropriate, will be consistent with accepted standards such as the Uniform System of Accounts.
    - iv. KYMEA will prepare, on a monthly basis for Board of Directors review, a statement of the financial condition of KYMEA including a report of financial transactions. Monthly financial statements will include year-to-date



revenue and expenditures as well as explanations for major variances to budget.

- v. Operations expenditures and capital expenditures will meet the requirements of generally accepted accounting principles (GAAP).
  - vi. KYMEA will review, on an annual basis, any ongoing transaction obligations related to market risks, credit risks, and liquidity risks. Note, as of the date of this policy, KYMEA does not have any trading-related risks.
  - vii. Annual Audit – KYMEA will engage an independent auditor to review its financial books and accounts annually. The audit is to be performed by an independent, certified public accountant. Additional financial risks and liquidity measures will be managed according to the Financial Risk Management Procedures and supporting internal control procedures.
- b. **Cash margin risk** is the risk associated with inadequate cash flow resulting from margin requirements of a contractual agreement. Credit exposures include replacement cost exposure on a mark-to-market basis when a counterparty's position is out-of-the-money.
- i. Cash margin risk will be managed consistent with the Financial Risk and Energy Risk Management Procedures.
- c. **Credit risk** is the risk of a counterparty's inability to pay its obligations (debts) to KYMEA or of a supplier that declares bankruptcy and abrogates a supply contract that must be replaced during a time of higher commodity market prices.
- i. Credit risk and counterparty performance risk will be managed according to the credit controls as specified in the Financial and Energy Risk Management Procedures.



## SECTION 1.9

### REFERENCE DOCUMENTS

1. Interlocal Cooperation Agreement Creating the Kentucky Municipal Energy Agency (Interlocal Agreement)
2. Bylaws of Kentucky Municipal Energy Agency (Bylaws)
3. Kentucky Municipal Energy Agency, All Requirements Power Sales Contract (AR Contract)
4. Agency Agreement for Procurement of Transmission Services (Transmission Services Agreement)
5. Resolution of the Kentucky Municipal Energy Agency Adopting provisions of the Kentucky Model Procurement Code (Resolution dated September 24, 2015)
6. Resolution of the Kentucky Municipal Energy Agency Designating Persons Authorized to Sign Checks (Resolution dated January 28, 2016)



PUBLIC POWER FOR KENTUCKY

*The objective of KYMEA is to provide cost-effective resources and services for the benefit of its members to enable them to achieve objectives they have set for themselves more efficiently and at lower costs than they could achieve individually.*