BIG RIVERS ELECTRIC CORPORATION
REGULAR BOARD OF DIRECTORS MEETING
JANUARY 15, 2010

The regular meeting of the Board of Directors of Big Rivers Electric Corporation was called to order at 8 a.m., CST, on Friday, January 15, 2010, at 201 Third Street, Henderson, Kentucky 42420.

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After an explanation and review by Al Yockey, Director Butler moved, seconded by Director Bearden, that the revised Policy No. 100 Enterprise Risk Management be approved as presented with an effective date of January 15, 2010. The motion was unanimously adopted.

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[redacted] the 2010 Corporate Safety Plan has now been finalized and would be sent to the Board.

Big Rivers
ELECTRIC CORPORATION

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COMPANY POLICY

POLICY NUMBER: 100	**ORIGINAL EFFECTIVE DATE: 1-15-10**
APPROVED BY: Board	**ORIGINAL APPROVAL DATE: 6-15-07**
DATE LAST REVISED: 1-15-10	

ENTERPRISE RISK MANAGEMENT ("ERM") POLICY

1. Policy Purpose

The purpose of this document is to formalize the policies of Big Rivers Electric Corporation ("Big Rivers") regarding managing its enterprise-wide risks. Accordingly, this policy will set forth Big Rivers':

- risk management objectives,
- risk governance structure and responsibilities,
- scope of business activities governed by this policy and the list of associated ERM guidelines and policy documents, and supporting risk management policies.

Big Rivers 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 Big Rivers' defined risk tolerance, and sufficient internal controls and procedures.

Managing the enterprise-wide risks of Big Rivers' business entails the coordination of resources and activities among all departments within Big Rivers.

2. Risk Management Objectives

Big Rivers exists primarily to safely deliver low-cost, reliable wholesale power, and cost effective shared services desired by its Members. Managing Big Rivers' risk is consistent with that mission, and serves the following objectives:

- to maintain risk within desired tolerances for a defined period in the future,
- to mitigate price volatility to the Members,
- to maintain a proactive safety, health, and loss prevention program designed to protect life and property, provide a hazard-controlled work environment, and comply with all applicable regulations,
- to meet lender debt covenants,
- to maintain financial liquidity within desired tolerances,
- to maintain an investment grade credit rating,

- to enhance the value of Big Rivers' assets/resources,
- to ensure that the risks of economic development and other business opportunities are effectively managed to increase the value of Big Rivers to its Members,
- to participate in commodity markets and derivative instruments for hedging and not for speculative purposes, and
- to develop an ERM culture throughout the organization and provide for an ongoing strategic planning process.

3. **Risk Governance Structure and Responsibilities**

Risk governance will follow a top-down approach whereby the Board of Directors ("Board") identifies Big Rivers' risk management objectives and provides risk management oversight. Supporting controls, policies and procedures will be implemented and aligned throughout the risk 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 Big Rivers' business models, risk tolerances, power supply objectives, financial objectives, safety objectives, and segregate responsibilities appropriately.

a. Board – ERM Duties

- Has a basic understanding of ERM,
- Approves Big Rivers' ERM objectives, and the president and chief executive officer's ("CEO") authority limits to conduct risk management transactions,
- Approves no less than annually a resolution of the energy supply goals (e.g., fuel cost, production targets), financial goals (e.g., liquidity, TIER, rates, costs, net margin), and risk tolerance guidelines around such goals. These goals and risk tolerance guidelines shall be consistent with the Board's desired risk management objectives, time horizons, and risk tolerance for managing enterprise risk,
- Approves, periodically reviews, and makes recommended changes to the ERM Policy that establishes an overall framework for evaluation, management, and control of risk,
- Approves participation in specific commodity markets and derivative instruments,
- Oversees the risk management activities of Big Rivers ,
- Establishes scope and frequency for management reporting to the Board,
- Periodically reviews risk exposures and compliance with policies and procedures,
- Discusses Big Rivers' major financial risk exposures and the steps management has taken or will take to mitigate, control, and monitor such exposures,
- Reviews and approves any new commodity products, locations, or markets,
- Approves management staff to serve as members of an Internal Risk Management Committee ("IRMC"),
- Receives reports by the independent risk management function on Big Rivers' compliance with its risk policies,
- Reviews and approves the energy risk identification and exposure management guidelines (Appendix A).

b. CEO – Risk Management Responsibilities and Duties

- Recommends staff to serve as members of the IRMC,
- Has authority to transact within the limits set by the Board in the Trading Authority Policy,
- Approves proper organization, separation, or consolidation of functional activities,
- Assures prudent administrative procedures are established for execution of commodity and derivative transactions, contract controls, credit controls, trading controls, enterprise-wide risk monitoring and measurement, settlement controls, and other risk management activities,
- Ensures that the identification and quantification of risks and related risk mitigation strategies are integrated into the strategic planning process,
- Establishes and maintains an effective working relationship with ACES Power Marketing ("APM").

c. IRMC – Responsibilities and Duties

Membership shall be comprised of seven executive voting committee members:

1. CEO
2. Sr. VP Financial and Energy Services and CFO
3. VP Production
4. VP Accounting
5. VP Administrative Services
6. VP System Operations
7. Community Relations Manager

The VP Governmental Relations and Enterprise Risk Management shall participate as a non-voting member of the committee and serve as the IRMC chairperson. The chairperson shall be responsible for keeping, or causing to be kept, a true and complete record of the proceedings. Other non-voting participants shall participate in the meetings as determined by the executive voting committee members.

The IRMC establishes a forum for discussion of Big Rivers' significant risks and must develop guidelines required to implement an appropriate risk management control infrastructure, which includes implementation and monitoring of compliance with Big Rivers' ERM-related policies. The IRMC executes its risk management responsibilities through direct oversight and prudent delegation of its responsibilities to the independent risk management function, as well as to other company personnel.

Responsibilities include:

- Reviews and recommends the ERM-related policies and oversees enforcement by the independent risk management function,
- Ensures that risk management objectives, risk tolerance guidelines, and authority limits are employed throughout Big Rivers,

- Receives reports by the independent risk management function concerning Big Rivers' compliance with its risk policies, controls, and procedures, in accordance with established policies, controls, and procedures,
- Recommends to the CEO the proper organizational structure, separation or consolidation of functional risk management activities,
- Reviews and approves proposed risk management strategies for strategic fit, risk exposure consistent with risk tolerance, and reporting and control requirements,
- Ensures approved strategies are consistent with Big Rivers' approved strategic business plan, risk management objectives, approved risk tolerance guidelines, and compliance with risk policies,
- Periodically reviews Big Rivers' risk management program (a detailed review at least once a year) in light of recent changes in business practices, improved procedures, Big Rivers' philosophy and strategy, or market changes; and ensures continued compliance with its established guidelines,
- Formulates risk management strategy, policy or procedures necessary for new product or market implementation,
- Requires and reviews regular risk reports provided by the independent risk management function,
- Reports to the CEO regularly on Big Rivers' risk management activities,
- Periodically engages an independent audit (internal and/or external) of risk control policies and procedures,
- Holds formal IRMC meetings at least quarterly, with standing agenda items including, but not limited to, current commodity market strategies, power cost uncertainty, level of exposure to non-member transactions, production strategies and exposures, financial strategies and exposures, environmental strategies and exposures, control requirements/enhancements, counterparty contract and credit exposure, and policy and procedural violations,
- Performs an annual review of transaction compliance with policies and procedures for market transactions executed within Big Rivers,
- Reviews the infrastructure supporting risk management and ensures that it meets the requirements for risk oversight and compliance,
- Reviews compensation policies to ensure they are structured to avoid incentives for excessive risk taking,
- Reviews and recommends that the Board approve the Big Rivers' annual strategic plan.

d. Independent Risk Management Function – Responsibilities and Duties

This function shall be the responsibility of the VP Governmental Relations and Enterprise Risk Management, who is organizationally independent of functions whose activities initiate or directly participate in managing most of the risk of Big Rivers. Various departments will be required to provide this function with reports or information required for risk assessment and analysis on a regular or periodic basis. Responsibilities include:

- Performs responsibilities delegated by the IRMC,

- Organizes and chairs the IRMC meetings,
- Engages the IRMC in discussions regarding events or developments that could expose Big Rivers to potential losses,
- Develops, recommends, and administers risk management processes and procedures; provides input to tools to assist in risk management,
- Provides risk management education/training to Board, staff and management,
- Reviews risk management activities, risk controls, and recommends modifications of controls to meet changing business needs,
- Reviews adequacy and accuracy of reports, and reports any deficiencies to the IRMC,
- Assesses risks to Big Rivers in aggregate, by department, and by material business activity,
- Performs periodic internal audits of risk control policies and procedures to ensure that Big Rivers complies with its risk policies,
- Reports any violation of Big Rivers' risk policies,
- Reviews and approves changes to the risk management policies and procedures, as appropriate,
- Reports regularly to the IRMC, at a minimum, but not limited to:
    - Portfolio model risk measures (1-60 months),
    - Financial forecasting model risk measures (1 month–20 years),
    - Resource planning model risk measures (5-20 years),
    - Power cost projections and confidence intervals,
    - Financial projections and confidence intervals,
    - Loss/near miss incidents and results of any investigations,
    - Production output,
    - Credit and contract risk exposures,
    - Other key performance indicators that support effective ERM,
    - Policy and procedural violations,
    - Status of exemptions and exceptions.
- Reports to the IRMC and Board on Big Rivers' compliance with its risk policies and risk management in accordance with the policies,
- Reviews and evaluates proposed risk management transactions to be executed by Big Rivers, and ensures adequate analysis has been performed with proper assessment and mitigation of any such risk consistent with risk management objectives and risk tolerance guidelines, and compliance with risk management policies, including the financial, legal, credit, and operational impacts.

e. APM – Roles and Responsibilities

Big Rivers is a member of APM and will use this alliance to obtain selected energy risk management and transaction execution services. In accordance with the agreements between Big Rivers and APM, APM is authorized to and shall:

- Periodically provide Big Rivers with a controls audit report from an independent auditor,

- Execute transactions on behalf of Big Rivers in accordance with established delegations of authority and compliance requirements set forth by the CEO,
- Administer counterparty contracts and manage credit in compliance with the Credit Policy according to the types of agreements the Big Rivers' CEO or the Sr. VP of Financial and Energy Services and CFO, as delegated by the CEO, authorizes APM to administer,
- Provide Big Rivers with daily reports on individual transaction details, commodity positions, and counterparty credit positions for transactions executed by APM,
- Provide Big Rivers with periodic risk profile reports addressing its energy risk and recommend hedging strategies within the time horizon specified by Big Rivers for assessment, but typically within the 1-60 month horizon,
- Capture Big Rivers' energy supply transactions in APM's risk management systems,
- Monitor compliance of transactions with Big Rivers' Trading Authority Policy,
- Confirm and settle transactions with Big Rivers' counterparties for commodities and transactions authorized by the CEO or the Sr. VP Financial and Energy Services and CFO, as delegated by the CEO, for APM to administer,
- Mark–to-market forward energy supply transactions for credit exposure purposes.

4. Scope of Business Activities Governed by this Policy

The scope of this policy is designed to address the management of the enterprise-wide risk associated with Big Rivers including, but not limited to:

- Commodity price risk,
- Volumetric risk,
- Power and fuel delivery risk,
- Operational risk,
- Financial risk,
- Environmental and regulatory risk,
- Counterparty contract and credit risk,
- Organizational risk,
- Board and officer risk,
- Safety risk.

The ERM and strategic planning functions of Big Rivers will facilitate the development and monitor the implementation of a strategic plan that will incorporate enterprise risks that require additional strategic focus. The plan will be consistent with the risk management policies and objectives of Big Rivers.

5. Associated ERM Guidelines and Policies

Supporting guidelines and policies are required as outlined below. Responsibility for their approval, modification, oversight, and compliance shall be consistent with the governance section of this policy and unless otherwise stated does not require the approval of the Board.

Policy 101	Energy Related Transaction Authority Policy
Policy 102	Risk Management Sanctions Policy
Policy 103	Hedge Policy
Policy 104	Financial Policy
Policy 105	Credit Policy
Policy 106	Economic Development Policy
Policy 107	Safety Policy
Appendix A	Energy Risk Identification and Exposure Management Guidelines

Big Rivers ELECTRIC CORPORATION

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APPENDIX A of the ENTERPRISE RISK MANAGEMENT (ERM) POLICY

1. **Identification of Enterprise-Wide Risks**

The enterprise-wide energy portfolio of Big Rivers is naturally exposed to the following primary risks:

- Commercial operational risk
  - Inadequate controls and procedures
  - Errors and fraud
- Commodity market price risk
  - Power
  - Fuels
  - Emission allowances
  - Bulk materials
- Concentration risk (or lack of diversity)
  - Suppliers
  - Coal
  - Smelter load
  - Steam coal generation unit technology
- Contract risk (counterparty performance)
  - Large industrial contract default
- Credit risk
  - Bad debts expense
  - Supplier bankruptcy (mark to market risk)
  - Large industrial bankruptcy
- Delivery risk
  - Transmission risk (aka congestion)
  - Fuel delivery risk
- Financial risk
  - Financial liquidity (cash flow, meeting debt covenants)
  - Interest rates
- Operations risk
  - Generation unit outages
  - Transmission outages
- Regulatory and environmental risk
  - Federal and state regulatory changes
  - Environmental requirements (New Source Review)
- Safety and hazard control risk
  - Loss of life
  - Injuries/Illness
  - Equipment damage

    - Loss of employee productivity
    - Federal, state and local regulations
- Volumetric risk
    - Load forecast/weather variability risk
    - Forced outage/de-rate risk
    - Loss of load
    - Load growth

Section 2 of this document defines these primary risks and other relevant definitions.

Section 3 identifies the tools and provides guidelines as to how risks shall be managed under most conditions.

Section 4 provides a description of Big Rivers' power supply risk profile and why it differs from others engaged in the energy markets.

2. Definition of Risks

Commercial operational risk is the risk of loss from inadequate or failed internal processes, people, and systems.

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, Big Rivers has risk that commodity prices rise, spike or are generally high when it is short of meeting its firm supply obligations. Big Rivers has risk that prices fall or are generally low when it is has excess capacity or electric energy compared to its firm supply obligations.

Due to heavy reliance on coal generation units, Big Rivers has a natural short position in the coal that it needs to supply fuel to its generating resources.

Commodity market price risk occurs across all tenors, from the hourly market to the long-term forward market (5 years +). Big Rivers is exposed to commodity price risk for power, coal, natural gas, emission allowance (SO2 and NOX), fuel oil and various bulk materials (e.g. ammonium, limestone) that exhibit price volatility.

Contract risk or 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 Big Rivers with no recourse under an event of default.

Concentration 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 (smelters).

Credit risk is the risk of a potential adverse occurrence of a counterparty's ability to pay its obligations (debts) to Big Rivers or that a supplier declares bankruptcy and abrogates a supply contract that must be replaced during a time of higher commodity market prices.

Delivery risk is the risk that Big Rivers cannot meet a firm supply obligation due to a transmission constraint. Delivery risk is natural to Big Rivers in meeting its firm supply obligations and reliability of service. Big Rivers can also be exposed to delivery risk in the transportation of its fuel supply.

Financial risk is the risk that a company's scarce resources are not best employed, resulting in adverse financial consequences. Quantification of risks in terms of their impact on financial measures including member rates, costs per MWh, margins, cash flow, credit, derivatives, TIER and DSC will be considered in risk analysis and mitigation. Risk quantification and mitigation pursuant to appropriate risk tolerance shall have significant focus.

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.

Operations risk is the risk associated with 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.

Safety and hazard control risk is the risk of loss from an accident or incident that results in bodily injury or property damage disrupting or impairing operations, and exposing the company to liability, repair, and other costs in the process of mitigating the loss.

Volumetric risk is the risk that energy commodity volumes will vary from expected and result in a potential loss due to changing commodity market prices. The primary volumetric risks that Big Rivers is exposed to are *load forecast/weather variability risk, forced outage/de-rate risk, loss of load (smelter load concentration), transmission delivery risk, and transmission congestion risk.*

Load forecast/weather variability risk is the risk that actual loads differ from forecasted loads due to the error in weather forecasts and load forecasts. This risk is natural to Big Rivers' portfolio since it serves load serving entities. Since this risk will result in Big Rivers being unintentionally long or short in the spot market, it naturally results in hourly market price risk.

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. This risk is natural to Big Rivers' portfolio since it owns and operates generation units to meet its load requirements.

Since this risk will result in Big Rivers being unintentionally short in the market, it also naturally results in market price risk.

Loss of load risk is the risk that Big Rivers loses a significant portion of one of its Members' load, for example, an aluminum smelter, and that the market price for electricity coincidentally falls below the sales price of the lost load and thereby creates a financial strain on the company. However, if market prices for electricity remain above the sales price of a potential lost load it would create a financial benefit to the company.

Congestion risk is the risk of negative price differentials between the location of power supplies and the demand location. If Big Rivers needs to buy electricity and the transmission system is congested, it would pay a premium to secure the needed electricity, if it is available at all. If Big Rivers has excess electricity to sell and the transmission system is congested, then it may not be able to sell the excess or may have to sell at a discounted price to a non-congested area. Congestion risk typically manifests itself in power commodity market price risk.

3. <u>Guidelines and Tools to Manage Risk</u>

ERM Framework Assessment and Risk Dictionary

These tools are used to identify and prioritize risks and the gaps at Big Rivers for effectively managing enterprise-wide risk. On an annual basis, the ERM function of the company will assess the ERM framework including gaps in: data, tools, processes, and education/skills gaps necessary for effectively managing risk. Additionally, the ERM function will identify and prioritize all of the enterprise risks of the organization and assure that each risk is being effectively managed within the policies and risk tolerance of the organization. Outcomes of these tools will be a key input to the strategic planning function of Big Rivers.

Strategic Planning Process

Big Rivers will develop a strategic planning process that identifies and addresses strategic issues, high priority risks, and gaps in the ERM framework. Several sources will have input into the strategic plan including employees, the Board, CEO, Members, ERM function, senior staff, and departmental functions. The objective of the process will be to identify and anticipate strategic issues and risks, understand the assumptions, quantify these risks, and enable Big Rivers to move swiftly to develop and implement effective strategies to address them.

Short/Intermediate-Term Planning - Portfolio Model

Market price risks and volumetric risks will be managed in the near term planning cycle (1-60 months forward) utilizing a portfolio model. The portfolio model is a risk assessment of Big Rivers' energy portfolio based on Monte-Carlo simulation that provides a cumulative probability curve of Big Rivers' variable costs in forward months, rolled up to years. The Board's risk tolerance will be set at least annually using this model as one tool, which will include a stress test outside of reasonable expectations of plant operations, commodity market prices and their volatilities, and load forecast.

Long-Term Planning – Integrated Resource Planning Model

Market risks and volumetric risks will also be managed by long-term resource planning for a period of 6-20 years. Big Rivers' Energy Services Department 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 and the financial forecasting modeling tool, will assist Big Rivers in making appropriate capital investments to meet the needs of its membership. Big Rivers will seek to meet a planning capacity reserve margin in accordance with applicable reliability region standards. The actual targeted reserve margin will be documented and managed through long-term generation additions and intermediate term purchased power contracts based upon the cost and risk tradeoffs of the company as identified in the Hedge Policy.

Financial Forecasting Model

Big Rivers will manage its financial risks and capital planning and budgeting process through the use of a probabilistic Monte-Carlo simulation tool. The financial forecasting modeling tool will be linked to the short/intermediate and long-term planning tools to enable Big Rivers to assess cost and risk tradeoffs and impacts on key financial metrics (e.g., targets for TIER, rates, DSC, cash flow, margins) of risk mitigation strategies. The financial forecast will generally be on a monthly basis for approximately 24 months and annually for calendar years beyond that period. The financial forecasting function of the company will work closely with departments that manage key risks and the ERM function.

Delivery Risk

Delivery risks for electricity and fuels will be managed by thoroughly evaluating the risk and procuring firm transmission and transportation in a proactive manner. Delivery procurement strategies will be developed in the Energy Services Department in coordination with electricity and fuel procurement activities. In the event that adequate firm transportation or transmission is not available to adequately mitigate risk, the IRMC will be formally notified as to recommended methods by which it will be managed.

Credit Policy

Credit risk and counterparty performance risk will be managed according to the credit controls, per the Credit Policy.

Contract Controls

Counterparty performance risks will be managed according to the Energy Related Transaction Authority Policy and supporting APM trading control procedures as requested by Big Rivers.

Diversity Management

Big Rivers will manage its concentration risks on a rolling 12-month basis by diversifying its capacity, fuel, and purchased power requirements as defined in the Hedge Policy.

Commercial Controls

Big Rivers will manage its commercial operational risks according to trading authority limits to conduct market transactions. The trading authority limits to conduct commodity market transactions are approved by Big Rivers' board, and are included in the Energy Related Transaction Authority Policy. Big Rivers 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 Related Transaction Authority Policy. Numerous other internal controls and procedures shall be in place at Big Rivers to manage other purchasing activities and vendor relationships.

Financial Policy - Liquidity Management

Financial risks will be managed according to the Financial Policy and supporting internal control procedures.

Hedge Policy

Commodity price risk and volumetric risk will be managed according to the Hedge Policy and supporting internal execution strategies and control procedures.

Risk Management Transactions

Numerous transactions may be entered into to mitigate risk consistent with the board-approved power supply cost goal and risk tolerance. Several hedging instruments and commodities are used to manage Big Rivers' enterprise risks, which include purchases or sales of physical commodities, financial instruments, fuel transportation, power transmission, power generation capacity, and fuel storage. The following hedging instruments and commodities are permitted to be transacted when used consistent with this policy and its supporting controls, policies and procedures:

- Physical Transactions
  - Forward power, natural gas, and coal
  - Options on power, natural gas, and coal
  - Spot market power, natural gas, and coal
  - Power transmission and ancillary services
  - Coal and natural gas transportation and ancillary services
- Financial Transactions
  - Futures contracts for power, natural gas, and coal
  - Swap contracts for power, natural gas, coal, and interest rates
  - Options on power, natural gas, and coal

- Weather protection transactions
- Unit outage protection transactions

Safety Policy

Safety and hazard control risk will be managed according to the Safety Plan, along with supporting internal safety and training policies and procedures.

4. Big Rivers' Energy Supply Risk Profile

Big Rivers 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.

- Big Rivers' mission is to safely deliver low-cost, reliable wholesale power, and cost effective shared services desired by its Members,
- Big Rivers is not in the energy business to trade speculatively (buy low – sell high), or to initiate energy risk positions,
- Big Rivers is not in the energy business to take at-risk positions in merchant generation,
- Big Rivers 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, demand side management, etc), and 3) the volumetric differences that occur between numbers 1 and 2 ('unmatched positions'),
- Big Rivers participates 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. There are about 730 hours in each calendar month, and due to the unpredictability of the weather, it is impossible to know when the peak load hour will be. Consequently, Big Rivers' forward short and long positions are measured in both MW and MWh.
- Sometimes Big Rivers also has forward positions that are net long after meeting its firm load obligations, and it will participate in the forward term electric market to hedge that risk by selling,
- Big Rivers participates in the weekly/daily/hourly electric market to balance its unmatched positions at the market price in real time, and in the near term timeframe of predictable weather trends,
- Big Rivers also participates 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,
- Big Rivers is not in the practice of mark-to-market revenue recognition.[1] Revenues from rates to its member systems are cost based, without variability for mark-to-market fluctuations,

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[1]Under the GAAP principle of matching revenues and expenses, even the required FAS 133 marks on options are usually deferred from affecting Big Rivers' statement of revenue and expense since the revenue recovery for option premiums will occur in the period(s) that the option can deliver energy.

- Unlike managing a portfolio of only standard traded electric products (e.g., 5X16 Firm LD at a pricing hub) that protect the parties financially from volumetric risk, Big Rivers' energy portfolio typically has significant volumetric risk, because:
  - Its load obligations are obviously not flat in volume, they fluctuate hour-by-hour, minute-by-minute,
  - Its loads can be difficult to predict (weather forecasts, weather correlation),
  - It owns generation, which is subject to forced outages and de-rates,
  - Some of its supply resources are not financially firm (hydro allocations, unit contingent purchases, non-firm purchases, etc.),
  - It has physical transmission delivery risks,
- Unlike managing a portfolio of only standard traded electric products (e.g., 5X16 Firm LD at a pricing hub) which are generally liquid, it would be very time consuming to liquidate the entire forward risk in a typical Big Rivers' energy portfolio. It is not unusual for Big Rivers to have unmatched positions of load obligations (short) and supply resources (long) that extend out in forward time for 20 to 30 years. In order to 'flatten' Big Rivers' book of unmatched risk positions to a risk neutral position, it would usually require a lengthy time period for a request for proposal ("RFP") and negotiation process to obtain a tailored physical 'wrap-around' alliance deal. Even then, because of the uncertainty of forward electric prices beyond about four years, these types of deals are usually limited to the next 5 or 10 years forward, not 20 to 30,
- 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 Big Rivers' business,
- Native load does not behave according to any derivative that can be loaded into a risk system,
- The proper risk measurement and decision support tool for most of Big Rivers' risks are 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.

Big Rivers Policy 100 Revision Record			
Number	Date	Notes	Approved by
Rev. 0	06-15-07	Enterprise Risk Management ("ERM") Policy	Big Rivers' Board
Rev. 1	01-15-10	Enterprise Risk Management ("ERM") Policy	Big Rivers' Board