

KENTUCKY MUNICIPAL ENERGY AGENCY

To: KYMEA Board of Directors

From: Board Risk Oversight Committee (BROC)

Date: June 27, 2019

Re: BROC Meeting on 6/27/2019

A meeting of the Board Risk Oversight Committee was held on 06/27/2019. Gary Zheng (Chairman), Tim Lyons, Doug Buresh, Heather Overby, Charlie Musson, Rob Leesman, and Michelle Hixon were present.

The chairman called the meeting to order and Doug Buresh began with an update from the IRC. The committee reviewed the following key responsibilities of the BROC:

- a. Monitors the activities of the IRC to ensure compliance with the Enterprise Risk Management Policy; the BROC notes that the IRC is in compliance.
- **b.** Receives and reviews from the Internal Risk Committee quarterly Risk Management reports on Business Operations, Energy, and Financial activities; The BROC reviewed the quarterly report from the 06/14/2019 IRC meeting.
- c. Reports annually on the Risk Management activities and results to the KYMEA Board; An Annual report will be presented in September, after the annual audit has been completed.
- d. Reviews and recommends changes of the Risk Management Policies to the KYMEA Board as it deems appropriate. The ERM was approved by the board in April and no additions are needed at this time.

Action Items

There were no actionable items.

<u>Attachments</u> IRC Report – 06/14/2019





To: Board Risk Oversight Committee (BROC)
From: Internal Risk Committee (IRC)
Date: June 14, 2019
Re: IRC Meeting on 6/14/2019

A meeting of the Internal Risk Committee was held on 06/14/2019. Doug Buresh (Chairman), Heather Overby, Rob Leesman, Charlie Musson, and Michelle Hixon were present.

Doug opened the meeting and began a discussion regarding the status of enabling agreements (ISDA and EEI). Rob gave an update on where we are with the individual contracts. The Chairman went through our Enterprise Risk Management Policy, and the following risk categories were discussed.

1. Business Operations Risks

- a. **Operational risk:** Is the risk of loss from inadequate or failed internal processes, people, and systems. KYMEA has put in place a number of systems to address operational risk. In the finance and accounting area, the agency implemented the procedures recommended by BKD (external auditor). The CEO pre-approves all agency expenditures, and each check is signed by both the CEO and CFO. The Director, Administrative Services and Communications performs the bank reconciliation and opens all incoming mail before it is distributed to the CFO. The CEO and CFO have access to on-line banking and serve as the administrator for each other. In the market analytics area, Board approved procedures and limits are in place. The front office is managed by the VP, Market Analytics, and the middle and back office is managed by the CFO. The CEO and ACES risk management provide oversight of each area. Hedges greater than or equal to one year require Board approval. Trades limits are established by the position report.
- b. **Contract Counterparty performance risk:** Is the risk of a counterparty's failure to perform. Counterparty risk has been addressed in KYMEA's PPA's. Further, each new counterparty (trading counterparty) undergoes a credit check by the CFO, General Counsel, and ACES.
- c. **Facility Operations risk:** Is the risk associated with power generation. These risks have been addressed in PPA's with penalty's associated with availability.
- d. Physical and cyber security risk: Is the risk to physical assets and information systems. At the



KYMEA office, there are locks, cameras, and electronic access in place for exterior doors. Inside the office, there are additional locks for the IT Closet, the MAC, and each file drawer. The agency has a six-foot fire safe for sensitive documents. Cybersecurity network security, passwords, and best practices have been implemented through a third-party IT security company. KYMEA has also contracted with a third party company to remove and shred any sensitive documents. These documents are stored in a locked bin until shredded.

- e. **Business interruption risk:** Is the risk that business is interrupted and will be unable to continue operations. In the event KYMEA HQ has a catastrophic business interruption (i.e., fire, tornado, etc.) The software and data for conducting day-to-day business are stored on the cloud and can be retrieved to a new location on new hardware if necessary. For the more critical second-by-second function of the MAC, an exact replica of the current meter data server has been purchased providing realtime redundancy. Once the final configuration of the primary system is complete, the backup system will be installed in a rack at a secure and geographically diverse location. In the event of a less cataclysmic event such as a power outage, the MAC has both battery back-up for a short period of time as well as generator backup for an extended period. A failover test is conducted semiannually. The most recent test was conducted on 6/22/2019, and all systems passed (see attachment).
- f. **Regulatory compliance risk:** Is the risk of failing to comply with local, state, and federal regulatory requirements. These risks are monitored and discussed with KYMEA's general counsel, FERC counsel, internal staff, and ACES. The agency makes best efforts to keep abreast of changing regulations, although somewhat difficult with limited staff.
- g. **Reliability compliance risk:** Is the risk of failing to comply with reliability requirements. As a participant in three balancing authorities (LKE, MISO, and PJM), the agency works with outside experts and ACES to monitor and ensure compliance. KYMEA's next task is to submit the MOD 32 to LG&E/KU in September.

2. Energy Risks

- a. **Commodity market price risk**: KYMEA is constructing market and portfolio models to assess the commodity price risk. ACES and S&P Global provide market intelligence, and the agency is in constant contact with power markets to keep abreast of market price fundamentals.
- b. **Contract Counterparty performance risk:** Counterparty performance risk is addressed in the KYMEA PPA's and through credit worthy counterparties as vetted through the ISDA and EEI process.
- c. **Concentration (lack of diversity) risk:** Is addressed in our integrated resource planning process.
- d. **Delivery risk:** Is addressed by having market access to both MISO and PJM with firm transmission to MISO, EEI (Joppa), and TVA (SEPA) as well has internal generation from PPS and Paris.
- e. **Forced outage and de-rate risk:** Is addressed in the Vistra, Paducah, and Paris agreements. There is no risk associated with the BREC agreement.



f. Volumetric risk

- i. Load forecast/weather variability risk: Near-term load forecast/weather variability risk is managed with the ITRON load forecasting software, ACES, and flexibility embedded in KYMEA PPA's (heat rate call options). Long-term volumetric risk will be addressed as part of the Integrated Resource Planning process.
- ii. Loss of load risk: This risk is addressed in the AR contract signed by the AR group.
- g. **Environmental Emission Allowances risk:** The possibility of a change in laws and carbon gives KYMEA mild exposure to this risk through the Big Rivers contract.
- h. **Renewable Energy Attributes risk**: While this is no specific REC risk at this time, this potential risk is partially addressed with the Ashwood Solar contract.

3. Financial Risks

- a. Financial risk: In the near-term, this risk is addressed through the budget/actual projections of revenues, expenses, and cash flow due to changing market and volumetric conditions. In the long-term, the financial metrics will be a key component of the Integrated Resource Planning process. There are no past due receivables. All member receivables are set up on monthly ACH. The annual audit is scheduled for August.
- b. **Cash margin risk:** This risk is low due to receivables being set up on monthly ACH and the agency's 30-million-dollar line of credit.
- c. **Credit risk:** The agency has collateral in place to help mitigate this risk. The agency and ACES are monitoring day-to-day market prices.

Attachments

Failover Semi-Annual Testing Report from 6/22/2019



Failover Semi-Annual Testing Report

Conducted 6/22/2019 by Walker Mills from Strategic Communications

This report has been prepared to document that all critical systems are connected to the UPS and will successfully failover to battery backup and then to Eastpoint Parkway facility backup generation (Cummins Diesel Unit) in the event power is disrupted to the KYMEA office.

| KYMEA Server Failover Testing Semi Annual | | | | |
|--|-----------------------|--|------|--|
| | | | | |
| KLOUSRV01 | Domain Server | | PASS | |
| ESX01 | Phone Server | | PASS | |
| CMS1000 | Meeting Server | | PASS | |
| D6L38CS2 | PME Server | | PASS | |
| KYMEASW01 | IT Switch | | PASS | |
| KYMEARTR01 | Main Phone Router | | PASS | |
| | Encompass Workstation | | PASS | |
| SG350X-48MP | AV Switch | | PASS | |
| | Spectrum Unit | | PASS | |
| VIDEOWALL 3-6 | MAC Minis | | PASS | |
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Walker Mills from Strategic Communications reported that all systems connected to the UPS successfully failed over during power disruption to the backup power supply and therefore passed the test.

