Company Name: KCP&L

Case Description: KCPL Integrated Resource Plan (IRP)

Case: EO-2012-0323

Response to fisk Shannon Interrogatories – Set Sierra Club_20120813

Date of Response: 08/30/2012

Question No.:27

For each of the coal-fired generating units that KCP&L wholly or partially owns or operates, identify and produce any analysis of the net present value revenue requirement, cost, or feasibility of retiring the unit and replacing the energy or capacity produced by that unit with any of the following resources in comparison to continuing to operate such unit:

- a. Energy efficiency
- b. Demand side management
- c. Demand response
- d. Combined heat and power
- e. Wind energy
- f. Solar
- g. Hydroelectric
- h. Construction of a new natural gas combined cycle facility
- i. Purchase of power from an existing natural gas combined cycle facility
- j. Purchase of an existing natural gas combined cycle facility
- k. Natural gas combustion turbines
- 1. Power purchase agreements
- m. Market purchases
- n. A combination of any or all of the resources identified in subsections a through m above

RESPONSE: (do not edit or delete this line or anything above this)

a. – n. Generating assets are not analyzed based on a one-for-one replacement with an alternative resource. Instead, alternative resource plans (ARP) are developed in an integrated analysis conforming to the Policy Objectives set forth in the Missouri Code of State Regulations 4 CSR 240-22.010. Twenty-two ARPs were analyzed that included items a – n listed above with the exception of items d., g. and i. Item d. is considered as a demand-side resource but was not analyzed in the 2012 DSM portfolio. Item g. was excluded as a supply-side resource with details available in Volume 4, Section 1.5, Pages 7 – 9. Purchased power is not assumed to be generated from a specific generator type therefore i. was not analyzed.

Attachment: Q27 MO Verification.pdf