Wirebury Connections Inc. INTERROGATORY #40

Interrogatory

KQ concludes that the electricity industry differs from many others because it has very high fixed costs resulting in a natural monopoly situation in which average costs decline with increased volume.

Reference: KQ p.18

a) In concluding that average costs decline with increased volume did KC assume that there were no or minimal capital costs required to attach the new load? What would happen if the fixed cost of attaching new load were significantly higher that the current fixed cost per customer?

b) Please provide the electrical utility cost information that KQ relied on to conclude that average costs decline as volume increases.

c) Was KQ able to confirm that Networks average costs would decline as it added load? If not, please explain why. If it was confirmed, please provide the source data that KQ relied on to reach this conclusion.

d) Please explain why an expanding utility's average costs would decrease if the cost of the new infrastructure needed to connect the new customer load was considerably higher than the historic depreciated cost of the utility's existing rate base. Would it be possible that Networks' average costs might increase as it adds volume if its expansion costs exceed its historic costs? If not, please explain why.

Response

(a) KEMA-Quantec made no specific assumption regarding capital costs to attach new load; however, a decline in average costs would generally be associated with common network assets (such as substations) as opposed to customer-specific investments. If such customer specific investments were substantially large, then the customer would generally be subject to a line extension/ capital contribution charge.

(b) KEMA-Quantec relied on no specific electric utility cost information to conclude that average costs decline as volume increases. This is a long-standing principle of utility economics driven by the capital intensive nature of the industry. Industry infrastructure is not designed, sited, built and maintained to support just one customer or group of customers – but the entire network system. Thus, as consumption

increases downstream of these infrastructure investments (such as a major substation), the utilization increases and average costs decline.

(c) Please refer to the response to J8-12-40(b).

(d) This question attempts to compare apples and oranges. Average cost can be declining, even if the incremental cost of connecting new load exceeds historic depreciated cost due to the effects of inflation over time. That is, the historic rate base consists of investments as expressed in the dollars associated with each specific investment at the time it was made. If inflation is positive over time, current year costs are greater than historic costs.