City of Independence

MEMORANDUM

Power & Light

DATE: June 10, 2014

TO: **E. Leon Daggett, Power & Light Director**

FROM: Paul Mahlberg, Power & Light Deputy Director

SUBJECT: **BPU Benchmarking Analysis**

Attached is a copy of the Executive Summary of a Benchmarking Analysis Completed for the Kansas City Board of Public Utilities (BPU). This summary document appears to be prepared by an outside consultant (Jerry McKenzie of MGT of America). It provides certain statistical information on Independence Power & Light Department (IPL) and compares this information with BPU. I was able to confirm that the numbers for IPL were derived from the City's Comprehensive Annual Financial Report (CAFR) for the fiscal year ending June 30, 2012. I do not know the source of BPU's numbers.

As with any benchmarking analysis, one needs to dig down into the details to see if the analysis is comparing apples to apples and if the comparison is valid. BPU's document details five different benchmarking areas:

1) Electric Power Supply
2) Transmission/Distribution
3) Electric Customer Services
4) Administrative & General
5) Total O&M Costs.

Below is a summary and discussion on each these areas.

Electric Power Supply

There is a major difference between BPU and IPL when considering power supply expenses. BPU generates the majority of their energy requirements and only purchases a small percentage under long-term power purchase agreements.

Total Power Supply Costs per kWH sold
- BPU = 5.31¢/kWh
- IPL = 6.31¢/kWh
- IPL = 4.76¢/kWh (corrected)

Purchased Power Costs per kWh purchased
- BPU = 3.40¢/kWh
- IPL = 4.88¢/kWh
- IPL = 3.16¢/kWh (corrected)

Conversely, we purchase a majority of energy requirements with the purchase power agreements for Iatan 2 and Nebraska City 2. Under these two agreements, the construction costs and capital additions are paid through monthly invoices. These costs are included in our power supply operating costs since we do not own the facilities.

BPU's costs for capital investment for their owned generation (similar to IPL's owned generation) do not show up in power supply operating costs. These costs are capitalized and depreciated and are not included in operating costs. Therefore, IPL's

numbers are inflated by these capital costs and are not comparable to BPU's numbers. The corrected numbers for IPL are shown in the table and are lower than BPU's numbers.

Transmission/Distribution

This index is typically analyzed on a cost per customer basis (APPA method) rather than the cost per kWh sold basis. The cost per customer is a better benchmark since it is a better indicator of performance since kWh sold doesn't directly tie to transmission and distribution costs. In addition, cost to deliver power from resources outside the utility system (Iatan 2, Nebraska City 2, etc.) is typically not included in this benchmark index since it isn't applicable to the utility's cost of its own transmission and distribution system. As you can see, IPL compares much more favorably on the T&D Cost per Customer basis.

Total T&D Cost per kWH sold
- BPU = 0.99¢/kWh
- IPL = 1.41¢/kWh
- IPL = 1.06¢/kWh (corrected)

Total T&D Cost per Customer
- BPU = $450 (estimated)
- IPL = $216

Electric Customer Services

These costs are composed of various items but the majority of the expenses for IPL are salaries for meter reading/support services personnel and interfund charges from the Water Department for IPL's share of customer service and billing costs. It is difficult to know if the comparison is valid without knowing what costs are included in BPU's numbers.

Total Annual Cost Per Retail Customer
- BPU = $56.53
- IPL = $72.09

Administrative and General

The summary document makes note that "BPU allocates benefit costs which could distort this comparison..." and, rightfully so since employee benefit costs are approximately one-half of the A&G costs for IPL. After removing employee benefit costs, IPL numbers are less than BPU's. In addition, this index is usually done on an Annual Cost per Retail Customer basis (APPA method) especially if you remove employee benefit costs from the calculation. Again, the results are quite different on this basis.

Total Annual Cost Per Employee
- BPU = $36,516
- IPL = $65,320
- IPL = $32,444(corrected)

Total Annual Cost Per Customer
- BPU = $359 (estimated)
- IPL = $135

Total O&M Costs

As is applicable for the Electric Power Supply Costs index mentioned above, the investment and capital costs for Iatan 2 and Nebraska City 2 should be excluded from IPL's calculation for Total O&M (Operation & Maintenance) Costs. After removing these costs, our number is much more in line with BPU's number.

Total O&M Cost Per kWh Sold
- BPU = 7.17¢/kWh
- IPL = 9.45¢/kWh
- IPL = 7.82¢/kWh (corrected)

As was mentioned during our budget presentation, annual system load factor (a system utilization measure) is a major driver in looking at costs per kWh. BPU's system load

factor (~ 55%) is significantly better than ours (~42%) and is a significant reason why our Total O&M costs per kWh are higher than BPU's.

Summary

As is detailed above, one needs to be very careful when benchmarking with other entities and, in particular, when comparing directly with another entity. Depending on the specifics, the results can be very misleading.