Q. WHAT ISSUES ARE YOU ADDRESSING?

A. I am addressing how any base revenue increase should be allocated among the various customer classes.

Q. ARE YOU SPONSORING ANY EXHIBITS TO YOUR DIRECT TESTIMONY?

A. Yes. I am sponsoring **Exhibit JP-1** through **JP-3**. These exhibits were prepared by me or under my supervision and direction.

Q. DO YOU ENDORSE KPCO'S PROPOSALS ON THOSE ISSUES NOT ADDRESSED IN YOUR DIRECT TESTIMONY?

A. No. Additionally, throughout my testimony and exhibits I use the revenue requirement parameters proposed by KPCO in this case for illustrative purposes. My reliance on these parameters should not be interpreted as an endorsement of KPCO's proposed revenue requirements.

Summary

Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

A. My findings and recommendations are as follows:

- KPCO's class cost-of-service study (CCOSS) reveals wide disparities between class rates of return. In particular, the lighting classes, consisting of Rates OL and SL, are providing rates of return *at current rates* that are more than twice the 7.26% proposed rate of return that KPCO is requesting in this proceeding. Four of the remaining seven classes are also currently earning rates of return higher than 7.26%.
- KPCO's proposed class revenue allocation would move rates only 5% closer to cost. At this pace it would require 20 rate cases to achieve cost-based rates.
- The Commission should reject KPCO's proposed class revenue allocation and adopt KLC's proposal (**Exhibit JP-2)**, which would move rates about ~~22~~20% closer to cost.

Q. WHAT ARE THE RESULTS OF KPCO'S CCOSS?

A. The results of KPCO's CCOSS are summarized in Table 1 below.

Table 1
Summary of KPCO's
Class Cost-of-Service Study Results
at Present Rates

Customer Class	Rate of Return	Subsidy ($000)
RS	0.82%~~1.08%~~	- ($30,458)~~($30,561)~~
SGS	10.26%~~10.56%~~	4,068~~4,084~~
MGS	7.98%~~8.27%~~	8,161~~8,193~~
LGS	7.99%~~8.29%~~	7,221~~7,255~~
IGS	5.20%~~5.47%~~	6,083~~6,101~~
PS	5.89%~~6.17%~~	971~~974~~
MW	10.89%~~11.19%~~	40~~40~~
OL	14.78%~~15.05%~~	3,444~~3,444~~
SL	15.37%~~15.68%~~	469~~470~~
Total KY. Jurisd.	3.66%~~3.93%~~	$0~~$0~~

Source: KPCo's Response to Staff 1-73, Att. 35

Q. PLEASE EXPLAIN THE TERMS RATE OF RETURN AND SUBSIDY.

A. Rate of return measures the profitability of each customer class. It is derived by dividing net operating income (revenues less allocated operating expenses) by rate base. A class that is providing a rate of return above the Total Kentucky Jurisdictional rate of return is paying rates that are above cost, while a class that is providing a rate of return below the Total Kentucky Jurisdictional rate of return is paying rates that are below cost.

The extent in which a class's rates are above or below cost is measured by the subsidy. A positive subsidy means that current revenues are above the allocated costs; that is, a class is subsidizing other classes. A negative subsidy means that current revenues are below the allocated costs; that is, a class is being subsidized by other classes. Thus, in order to move rates closer to cost, any change in base rate revenues should be allocated to customer classes in a manner that reduces the subsidies at present rates.

Q. DO YOU AGREE WITH ALL OF THE COST ALLOCATION METHODOLOGIES USED BY KPCO IN THIS PROCEEDING?

A. No. However, as demonstrated in Table 1 above, the class rates of return in KPCO's CCOSS are widely disparate. Thus, using alternative cost allocation methodologies would not change the fact that KPCO's current rates are not cost-based.

Q. WHAT DO THE RESULTS OF THE CLASS COST-OF-SERVICE STUDY DEMONSTRATE?

A. KPCO's present rates are not cost-based. There are wide variations in the earned rates of return by customer classes. *Six of the nine customer classes*—Small General Service (Rate SGS), Medium General Service (Rate MGS), Large General Service (Rate LGS), MW, OL, and SL—*are providing rates of return that are already well in excess of the ~~7.26~~6.73% overall system rate of return that KPCO is proposing in this proceeding*. Thus, in an effort to achieve cost-based rates, these six classes should not receive any rate increase in this proceeding. However, this would require very large rate increases to the remaining three customer classes. Accordingly, as discussed below, KPCO is proposing to recognize the principle of gradualism.

opposite is also true for a class that is providing a below system-average rate of return; that is, this class is being subsidized by other classes.

Q. IS ANY OF THE PROPOSED $65.4 MILLION BASE REVENUE INCREASE RELATED TO THE RECOVERY OF FUEL AND PURCHASED POWER COSTS?

A. No. KPCO is seeking an increase to recover higher base rate costs and not higher fuel and purchased power costs. This is notable because fuel and purchased power are among KPCO's largest single operating expense. Accordingly, removing fuel and purchased power expense would provide a better measure of KPCO's proposed class revenue allocation.

Q. HAVE YOU CALCULATED THE PROPOSED BASE REVENUE INCREASE BOTH OVERALL AND BY CUSTOMER CLASS WITH FUEL AND PURCHASED POWER COSTS REMOVED?

A. Yes. The calculation is provided in the table below.

KPCO's Proposed Base Revenue Increase
Excluding Fuel and Purchased Energy Cost Recoveries
($000)

Description	Amount
Proposed Base Revenue Increase	$~~65,394~~60,397
Present Sales Revenues	$~~500,400~~499,135
Fuel and Purchased Energy Charges*	$164,766
Non-Fuel Revenues	$~~335,634~~334,369
Percent Increase	~~19.5%~~18.1%

* 2.88485¢ per kWh.

KPCO is projecting $~~500.4~~499.1 million of revenues from firm electric sales during the test year. Of this amount, fuel and purchased power energy costs account for about $164.8 million. The $164.8 million includes costs recovered in the FAC (0.15985¢ per kWh) and fuel and purchased energy costs embedded in base rates (2.725¢ per kWh). Removing fuel and purchased energy charges leaves $~~335.6~~334.4 million of non-fuel revenues. Dividing the proposed $~~65.4~~60.4 million increase by $~~335.6~~334.4 million results in an ~~19.5~~18.1% increase. Thus, KPCO's proposal is effectively an ~~19.5~~18.1% non-fuel rate increase.

Q. HAVE YOU RESTATED KPCO'S PROPOSED CLASS REVENUE ALLOCATION RELATIVE TO NON-FUEL BASE REVENUES?

A. Yes. **Exhibit JP-1**, page 2 restates KPCO's proposed class revenue allocation with all fuel and purchased energy cost recoveries removed. As can be seen, all non-residential customer classes would receive below-average increases except for the Industrial General Service (IGS) class, which would receive close to a system-average increase.

Q. HOW DID KPCO DETERMINE ITS CLASS REVENUE ALLOCATION?

A. KPCO states that its objective was to eliminate subsidies gradually over time based on the results of the CCOSS as well as the ratemaking principle of gradualism for its proposed class revenue allocation.[1]

Q. HOW DID KPCO APPLY GRADUALISM?

A. KPCO limited the rate increase by reducing each classes' subsidy by 5%. In other words, rates would be moved only 5% closer to cost in this proceeding.

[1] Direct Testimony of Douglas R. Buck at 20-21; Direct Testimony of Ranie K. Wohnhas at 8.

- No increase in lighting rates because these rates are currently providing rates of return that are in excess of twice the proposed system average rate of return.
- About ~~40~~41% of the system average non-fuel revenue increase to the SGS and MW classes.
- About 66% of the system average non-fuel revenue increase to the MGS and LGS classes; and
- About ~~80~~81% of the system average non-fuel revenue increase to the IGS and Public School (PS) classes.

Q. HAVE YOU CONFIRMED THAT THE CLASS REVENUE ALLOCATION SHOWN IN EXHIBIT JP-2 WOULD RESULT IN MOVING ALL RATES CLOSER TO COST?

A. Yes. **Exhibit JP-3** shows the CCOSS results at KLC's proposed class revenue allocation. Overall, KPCO's rates would move about ~~22~~20% closer to cost. This is in stark contrast to KPCO's proposed class revenue allocation, which would move rates only 5% closer to cost.

Q WHY SHOULD THE LIGHTING CLASSES RECEIVE NO INCREASE IN THIS PROCEEDING?

A The OL and SL classes should not receive any rate increase in this proceeding because these classes are earning rates of return *at current rates* that are more than twice the ~~7.26~~6.73% system average rate of return that KPCO is seeking in this proceeding.

Q WOULD IT BE APPROPRIATE TO RAISE THE INSTALLATION CHARGES APPLICABLE TO LIGHTING CUSTOMERS IN THIS PROCEEDING?

A No. As long as the OL and SL class rates of return are above the system average, which would be the case even under KPCO's proposed class revenue allocation, the current installation charges should be retained.

Q. IF THE COMMISSION AUTHORIZES A LOWER INCREASE FOR KPCO, HOW SHOULD THAT LOWER INCREASE BE SPREAD AMONG THE CUSTOMER CLASSES?

A. My recommendation would be to scale down the base revenue requirement in proportion to the overall base revenue increase that the Commission ultimately awards. For example, if KPCO receives a $~~32.7~~30.2 million base revenue increase (which is ~~91.8~~92.3% of its proposed base revenue requirement) then the amounts shown in **Exhibit JP-2**, column 2 should be reduced by ~~8.2~~7.6%.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

KENTUCKY POWER COMPANY
Updated Proposed Class Revenue Allocation
Measured on Total Revenues Including Adjustment Clauses
Twelve Months Ended February 28, 2017
(Dollar Amounts in $000)

Line	Customer Class	Total Revenues at Present Rates	Proposed Revenue Increase		Percent of System Average Increase
			Amount	Percent	
		(1)	(2)	(3)	(4)
1	RS	$215,745	$34,504	16.0%	132%
2	SGS	18,576	1,693	9.1%	75%
3	MGS	53,331	5,403	10.1%	84%
4	LGS	51,375	4,762	9.3%	77%
5	IGS	138,770	11,853	8.5%	71%
6	PS	11,504	1,287	11.2%	92%
7	MW	194	15	7.8%	64%
8	OL	8,232	780	9.5%	78%
9	SL	1,407	100	7.1%	59%
10	Total KY. Jurisd.	$499,135	$60,397	12.1%	100%

Source: KPCo response to Staff 1-73, Attachment 97.

KENTUCKY POWER COMPANY
Updated Proposed Class Revenue Allocation
Measured on Base Revenue Excluding
Embedded Fuel Charges
Twelve Months Ended February 28, 2017
(Dollar Amounts in $000)

Line	Customer Class	Total Revenues at Present Rates	Fuel Cost Recoveries Included at 2.88485¢/kWh	Non-Fuel Revenues at Present Rates	Proposed Revenue Increase Amount	Proposed Revenue Increase Percent	Percent of System Average Increase
		(1)	(2)	(3)	(4)	(5)	(6)
1	RS	$215,745	$58,921	$156,824	$34,504	22.0%	122%
2	SGS	18,576	3,819	14,758	1,693	11.5%	64%
3	MGS	53,331	13,278	40,053	5,403	13.5%	75%
4	LGS	51,375	15,020	36,355	4,762	13.1%	73%
5	IGS	138,770	68,972	69,798	11,853	17.0%	94%
6	PS	11,504	3,219	8,286	1,287	15.5%	86%
7	MW	194	57	137	15	11.0%	61%
8	OL	8,232	1,242	6,990	780	11.2%	62%
9	SL	1,407	239	1,168	100	8.5%	47%
10	Total KY. Jur	$499,135	$164,766	$334,369	$60,397	18.1%	100%

KENTUCKY POWER COMPANY
Updated KLC Proposed Class Revenue Allocation
Twelve Months Ended February 28, 2017
(Dollar Amounts in $000)

Line	Customer Class	Non-Fuel Revenues Present Rates	Non-Fuel Revenues KLC's Proposed	Increase	Percent Increase	Percent of System Average Increase
		(1)	(2)	(3)	(4)	(5)
1	RS	$156,824	$195,585	$38,761	24.7%	137%
2	SGS	14,758	15,851	1,093	7.4%	41%
3	MGS	40,053	44,828	4,775	11.9%	66%
4	LGS	36,355	40,690	4,334	11.9%	66%
5	IGS	69,798	80,010	10,212	14.6%	81%
6	PS	8,286	9,498	1,212	14.6%	81%
7	MW	137	147	10	7.4%	41%
8	OL	6,990	6,990	0	0.0%	0%
9	SL	1,168	1,168	0	0.0%	0%
10	Total KY. Jurisd.	$334,369	$394,766	$60,398	18.1%	100%

KENTUCKY POWER COMPANY
Summary of Updated Class Cost-of-Service Study Results
Under The Present and KLC's Proposed Class Revenue Allocations
Twelve Months Ended February 28, 2017
(Dollar Amounts in $000)

		Rate of Return		Subsidy		
Line	Customer Class	Present Rates	KLC Rates	Present Rates	KLC Rates	Movement To Cost
		(1)	(2)	(3)	(4)	(5)
1	RS	0.82%	4.43%	-$30,458	-$24,678	19%
2	SGS	10.26%	12.03%	4,068	3,265	20%
3	MGS	7.98%	10.50%	8,161	7,125	13%
4	LGS	7.99%	10.59%	7,221	6,432	11%
5	IGS	5.20%	7.78%	6,083	4,138	32%
6	PS	5.89%	8.68%	971	848	13%
7	MW	10.89%	12.71%	40	33	17%
8	OL	14.78%	14.78%	3,444	2,491	28%
9	SL	15.37%	15.37%	469	346	26%
10	Total KY. Jurisd.	3.66%	6.73%	$0	$0	20%

Source: KPCo response to Staff 1-73, Attachment 97.