



HUDSON PUBLIC POWER

ELECTRIC RATE AND COST OF SERVICE STUDY

February 25, 2014

Courtney & Associates

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SCOPE OF SERVICES

- Revenue Requirements Analysis
- Cost of Service Analysis
- Rate Review
- *Develop New Rates**

** To be completed*



REVENUE REQUIREMENTS ANALYSIS

1. Project Energy Sales
2. Project Power Supply Requirements and Costs
3. Project Revenues at Current Rates
4. Project Revenue Requirements
5. Determine Overall Revenue Adjustment



PROJECTED ENERGY SALES (kWh)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Residential	75,240,000	75,240,000	75,240,000
Commercial	73,730,000	73,730,000	73,730,000
ED (Rate "E")	27,600,000	27,600,000	27,600,000
Large Power (E2)	7,200,000	7,200,000	7,200,000
Totals	<u>183,770,000</u>	<u>183,770,000</u>	<u>183,770,000</u>



PROJECTED POWER SUPPLY REQUIREMENTS & COSTS

<u>Year</u>	<u>kWh(1)</u>	<u>Amount</u>	<u>\$/kWh</u>
2014	197,602,151	\$ 14,478,310	\$ 0.07327
2015	197,602,151	15,535,481	0.07862
2016	197,602,151	14,952,555	0.07567

(1) Includes unbilled losses of 7%.

PROJECTED REVENUES AT CURRENT RATES *

	<u>kWh</u>	<u>\$/kWh*</u>	<u>Amount</u>
Residential	75,240,000	\$ 0.1159	\$ 8,722,976
Commercial	73,730,000	0.1179	8,695,374
ED (Rate "E")	27,600,000	0.0650	1,794,000
Large Power (E2)	7,200,000	0.0733	527,544
Totals	<u>183,770,000</u>	<u>\$ 0.1074</u>	<u>\$ 19,739,894</u>

* Power Cost Adjustment of \$ 0.03294 per kWh (2014).



PROJECTED REVENUE REQUIREMENTS

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Power Supply (1)	\$ 13,879,686	\$ 14,936,857	\$ 14,353,931
Other O&M	4,201,000	4,394,530	4,597,579
kWh Tax	791,594	791,594	791,594
Capital Outlay	966,100	995,083	1,024,935
Debt Service(2)	783,890	782,545	806,160
Other Income	(100,000)	(100,000)	(100,000)
Net Revenue Requirements	<u>\$ 20,522,270</u>	<u>\$ 21,800,609</u>	<u>\$ 21,474,199</u>

(1) Excludes OMEGA JV5 Debt Service.

(2) Includes OMEGA JV5 Debt Service.

DETERMINATION OF OVERALL REVENUE ADJUSTMENT

	<u>Revenues at Current Rates*</u>	<u>Revenue Requirement</u>	<u>Revenue Adjustment Amount</u>	<u>%</u>
2014	\$ 19,739,894	\$ 20,522,270	\$ 782,375	4.5%
2015	20,907,193	21,800,609	893,416	4.4%
2016	20,415,729	21,474,199	1,058,470	5.3%

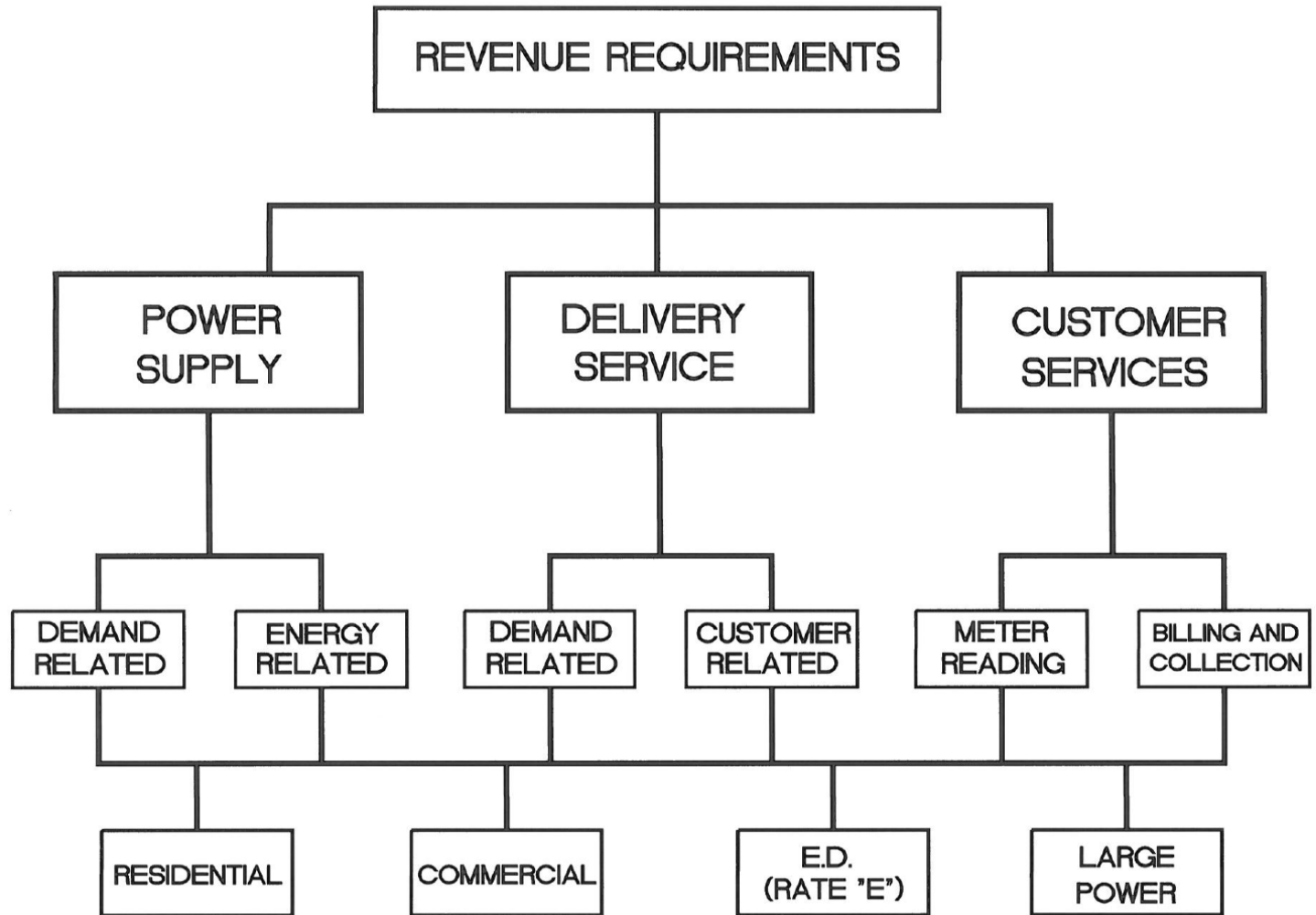
- * Assumes ED(Rate "E") reverts to prior rate when the existing ED Contract expires.
- ** Based on Revenues at Current Rates, excluding revenues for ED (Rate "E") (2014) and Large Power (E2) customers.



CONCLUSIONS & RECOMMENDATIONS

- Revenues at Current Rates are **NOT** Sufficient to Meet Near Term (2014-2016) Revenue Requirements
- Revenues Need to be Increased Overall by Approximately 5% in Order to Meet the Projected 2016 Revenue Requirement.

"UNBUNDLED" COST OF SERVICE ANALYSIS





UNIT COST OF SERVICE

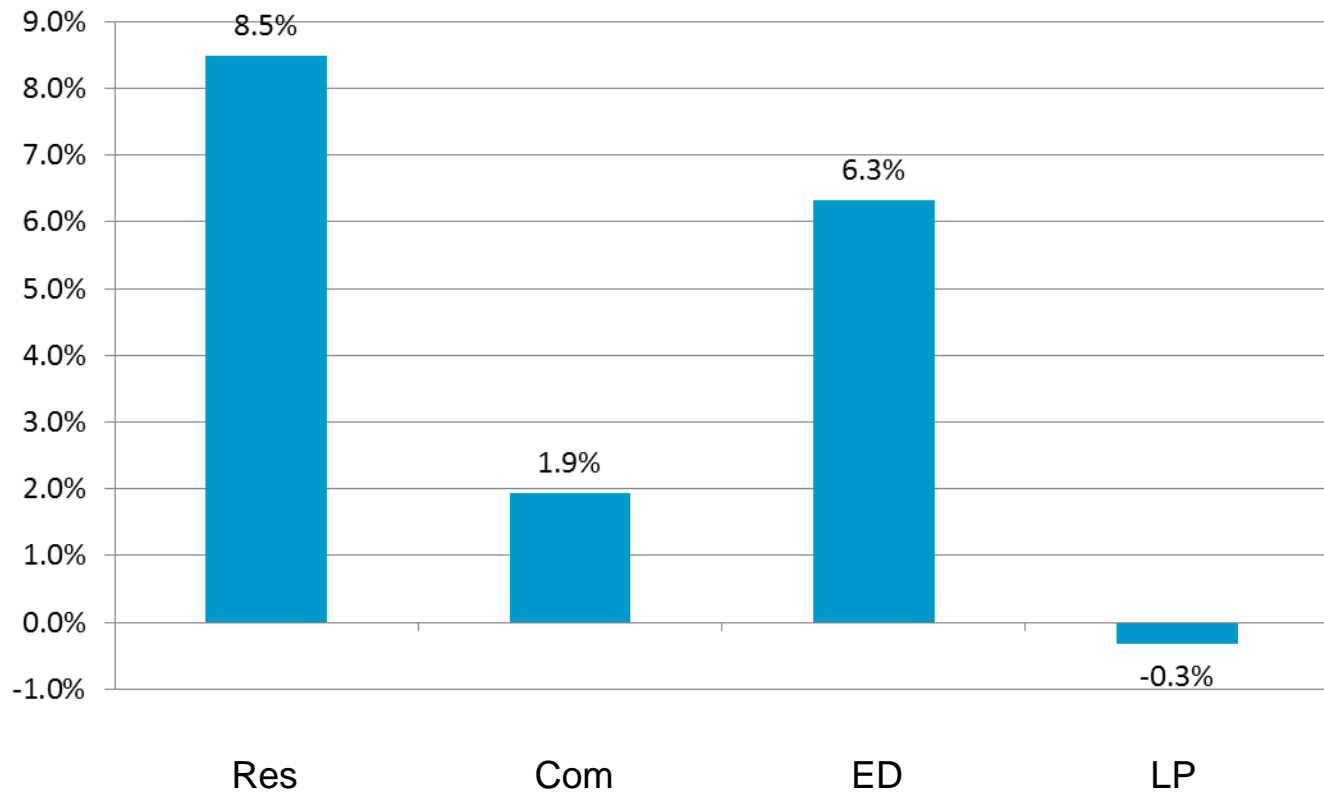
- Divide Functionalized Costs by Units of Service
- Power Supply - Demand - \$14.63 / Generation kW-Mo.
- Power Supply - Energy - \$ 0.039 / Generation kWh
- Delivery Service - Demand - \$ 6.53 / Delivered kW-Mo.
- Delivery Service - Customer - \$ 17.66 / Wt. Customer/Mo.
- Consumer Service - Meter reading - \$ 3.62 / Wt. Meter/Mo.
- Consumer Service - Billing - \$ 0.27 / Customer/Mo.

COS vs. CURRENT RATES (1)

<u>Rate Class</u>	<u>Revenue at Current Rates</u>	<u>COS Results</u>	<u>Under(Over)Recovery</u>	
			<u>\$</u>	<u>%</u>
Residential	\$ 8,916,193	\$ 9,672,764	\$ 756,571	8.5%
Commercial	8,884,713	9,057,344	172,632	1.9%
ED (Rate "E")	2,070,000	2,201,006	131,006	6.3%
Large Power (E2)	544,824	543,085	(1,739)	(0.3%)
Totals	\$ 20,415,729	\$ 21,474,199	\$ 1,058,470	5.2%

(1) Reflects 2016 Revenues and Test Year.

RATE INCREASE (DECREASE) REQUIRED TO MEET COST OF SERVICE RESULTS



Overall Increase \approx 5.2%



CONCLUSIONS & RECOMMENDATIONS

- The Cost of Service Analysis Indicates that the Commercial Class is Slightly Subsidizing the Residential Class and ED (Rate "E") Class.
- Future Rate Adjustments Should Move Revenue Distribution Towards Cost of Service Results.
- Continue to Monitor Cost of Service and Adjust Rates as Needed.



RATE REVIEW

- Review Existing Rates
- Compare Existing Rates to Cost of Service
- Identify Concrens
- *Develop New Rates**

** To be completed*

RESIDENTIAL

- Adopted April 3, 1996
- Customer Charge: \$ 6.237 / Month
- Energy Charge:
 - First 1,600 kWh @ \$ 0.07942/kWh
 - Over 1,600 kWh @ 0.06270/kWh
- Power Cost Adjustment
 - All kWh @ \$ (1)

(1) Varies monthly based on actual power supply costs.

COMMERCIAL

- Adopted April 3, 1996
- Customer Charge: \$ 6.237 / Month
- Energy Charge:
 - First 2,000 kWh @ \$ 0.10714/kWh
 - Next 28,000 kWh @ 0.09350/kWh
 - Next 70,000 kWh @ 0.06963/kWh
 - Over 100,000 kWh @ 0.06330/kWh
- Primary Service Discount: 3.5%
- Primary Metering Discount: 2.0%
- Power Cost Adjustment
 - All kWh @ \$ (1)

(1) Varies monthly based on actual power supply costs.

Large Power (E2)

- Adopted September 1, 2006
- Requires Special Agreement
- Customer Charge: (Per Month) \$ 100.00
- Demand Charge: (Per kW/kVar)
 - All kW \$ 12.00
 - All kVar 0.50
- Energy Charge: (Per kWh)
 - All kWh \$ 0.04
- Power Cost Adjustments *

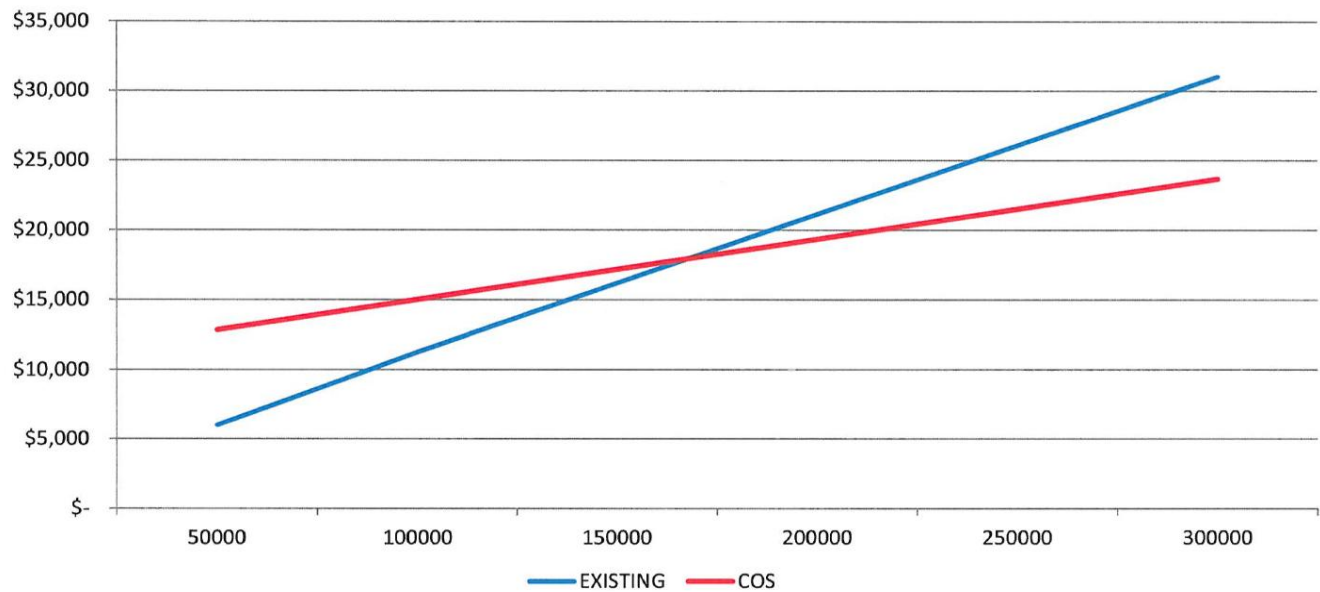
* Adjusted Monthly to Reflect City's Incremental Power Supply Cost.



POWER SUPPLY COST ADJUSTMENT

- PSCA is Reviewed and Adjusted Monthly to Reflect the City's 3 Months Rolling Average Power Supply Cost.
- Current Base Power Supply Cost = \$ 0.0431/kWh
- Includes Loss Adjustment of 7%

City of Hudson, Ohio
LARGE COMMERCIAL BILL COMPARISON - 500 KW
EXISTING RATE VS. COST OF SERVICE





CONCLUSIONS

- Existing Customer Charges are Below Customer Related Costs
- Commercial Rate and ED Rate “E” Do Not Track With Cost of Service Results (No Demand Charge)
- High Load Factor Customers Are Subsidizing Low Load Factor Customers
- Rates Do Not Include Recovery of kWh Tax



RECOMMENDATIONS

- Increase Customer Charges to Move Towards Cost of Service Results.
- Develop a Large Commercial Rate Which is More In-Line With Cost of Service Results (Demand Charge / Energy Charge).
- Move ED Customer to Large Commercial Rate When Existing Contract Expires.
- Include Recovery of kWh Tax in Rates
- Roll the Current Power Supply Cost Adjustment into Base Rates

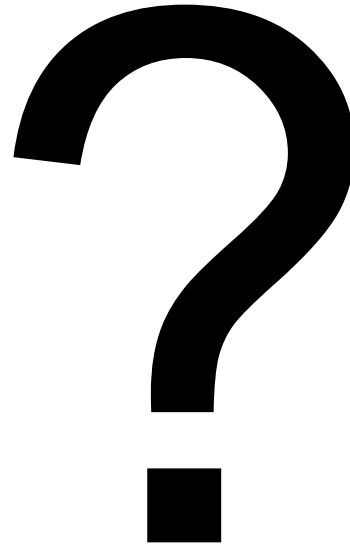
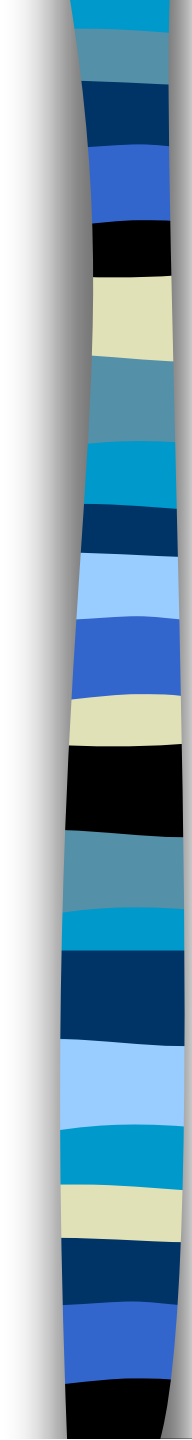
SUMMARY

- Revenues at Current Rates are **NOT** Sufficient to Meet Near-Term Revenue Requirements.
- Commercial Class is Slightly Subsidizing the Residential Class and ED (Rate "E") Class.
- Customer Charges are Below Customer Related Costs.
- Commercial Rate and ED Rate "E" Do Not Track With COS



RECOMMENDATIONS

- Modify Rates to Provide Sufficient Revenue to Meet the Projected Revenue Requirements and Move the Revenue Distribution Towards the COS.
- Develop a Large Commercial Rate Which is More In-Line With COS Results (Demand /Energy Charge).
- Move ED Customer to Large Commercial Rate When Existing Contract Expires.
- Increase Customer Charges for All Classes
- Include Recovery of kWh Tax in Rates
- Roll Current PSCA into Base Rates



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