



**Okanogan County Public Utility District  
July 15, 16, and 22, 2013**

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**July 2013 Public Meetings –  
2013 Equity Management Plan and Rate Study**

**Richard Cuthbert, Senior Project Manager**

# Presentation Overview

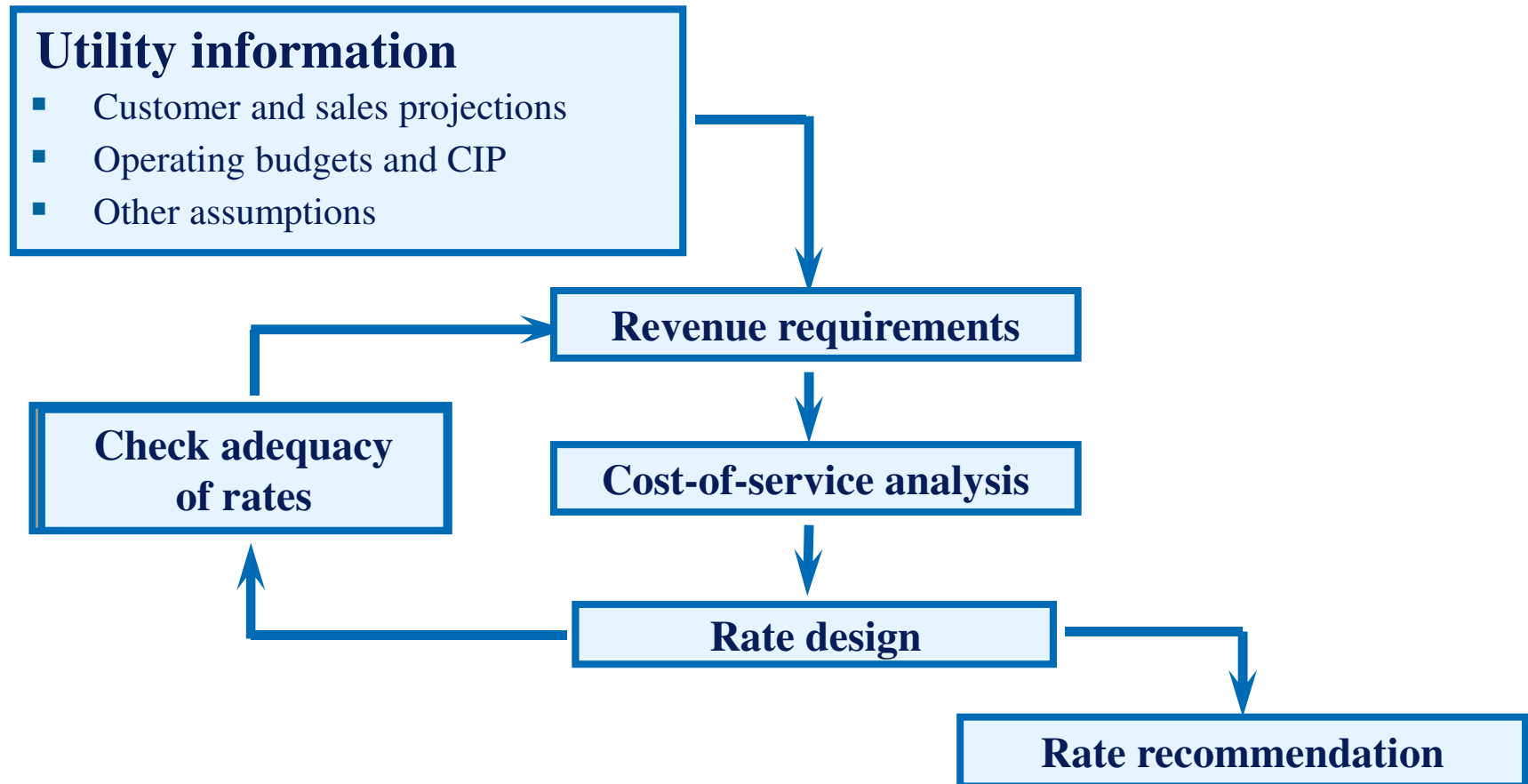
- Review of electric utility ratemaking process
- Review of the equity management plan (EMP) and how it impacts the ratemaking process
- Review final draft 2013 results
  - EMP Base Case and Alternative Scenarios
  - Revenue Requirements Analysis
  - Cost-of-Service Analysis
  - Two Rate Design Analysis Options

# Summary of EMP and Rate Review Process

- **Preliminary EMP presented to Board – December 2012**
- **2013 EMP scenarios and draft rate options – Jan/Feb 2013**
- **Rate Review Panel meetings – February to June 2013**
- **Draft EMP and rate proposals presented to Board – May 2013**
- **Public Meetings – July 15, 16, and 22, 2013**
- **Target Board vote on final rates – July 30, 2013**
- **Target rates implementation date – September 1, 2013**

# Review of the Ratemaking Process

# Steps in Electric Utility Ratemaking Process



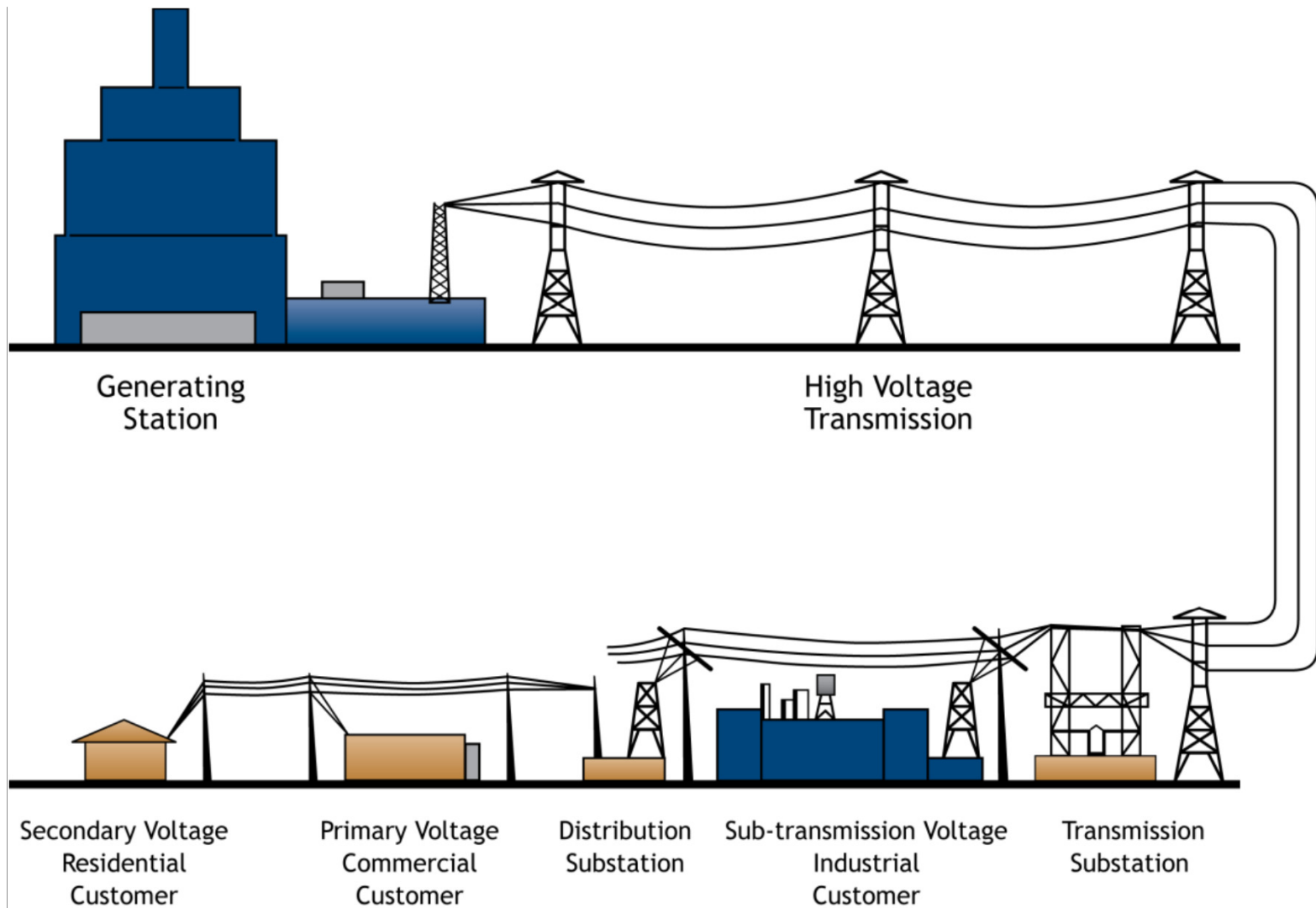
# Revenue Requirements

- **Determines the overall level of revenue needed to provide electric service**
- **Items included in the revenue requirement:**
  - **Operation and maintenance costs**
  - **Other operating costs (e.g., taxes)**
  - **Interest expense**
  - **Depreciation**
  - **Other income (e.g., interest earnings)**
  - **Margins**

# Cost-of-Service Analysis

- **Cost-of-service (COS) equals total cost of providing utility service to groups of similar customers or customer classes**
- **COS analysis is the process of classifying and allocating a utility's revenue requirements to customer classes**

# Typical Electric Utility System





# Overview of the District's Equity Management Plan

# Equity Management Plan (EMP)

- Spreadsheet-based model
- Projects District's financial performance over a 10-year period
- Equity management plan is used to evaluate
  - Financial metrics
  - Relative equity and debt levels
  - Debt financing options and long-term cost impacts
  - Available cash balances
  - Review of necessary rate adjustments over time
- Allows analysis of alternative scenarios

# Key Factors in the EMP Analysis

- **Model Inputs**
  - Power supply assumptions
  - Load forecast
  - Operating expenses
  - Capital improvements
- **Model Outputs**
  - Equity levels / Equity ratio
  - Debt Service Coverage Ratios (DSC)
  - Times Interest Earned Ratios (TIER)
  - Cash reserves
  - Rate adjustments

# Findings of 2010 EMP

- **Base Case rate increases needed:**
  - **12% in 2010**
  - **20% in 2012**
  - **10% in 2014**
- **Retail sales growth of 2.6% per year**
- **Gradual wholesale revenue decline**
- **Adopted rate increases:**
  - **Three 6.5% increases in 2010, 2011 and 2012**
  - **Annual 3% increases thereafter**
  - **Plus cost of power adjustment (COPA)**

## Significant Changes Since 2010 EMP: Difference in 2012 Operating Results

	Projected	Actual	% Change
Retail Sales (GWh)	668	580	-13%
Retail Revenues (millions)	\$40.7	\$35.6	-13%
Average Unit Retail Revenues (¢/KWh)	6.10	6.13	0.5%
Wholesale Revenues (millions)	\$4.6	\$3.5	-24%

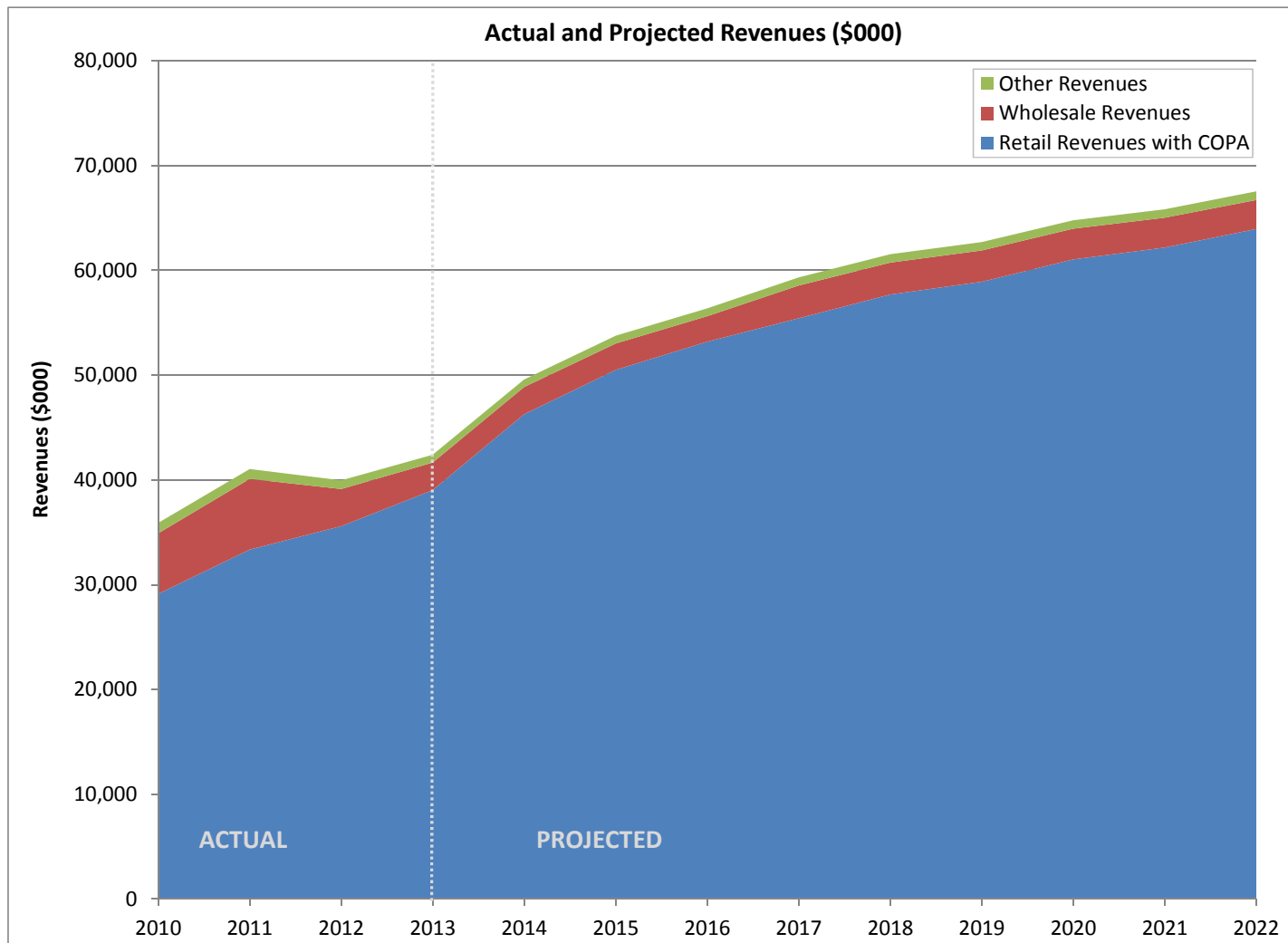
# 2013 EMP Assumptions

- Total Retail Load Requirements
  - 2012-2021: 1.0% growth
- BPA Power Supply Costs
  - 9.6% increase beginning in October 2013 for two years
- BPA Transmission Service
  - 13% increase for two years beginning in October 2013
  - 6% increases thereafter (every other year)
- Enloe Dam power available in 2017

# 2013 Capital Requirements and Funding

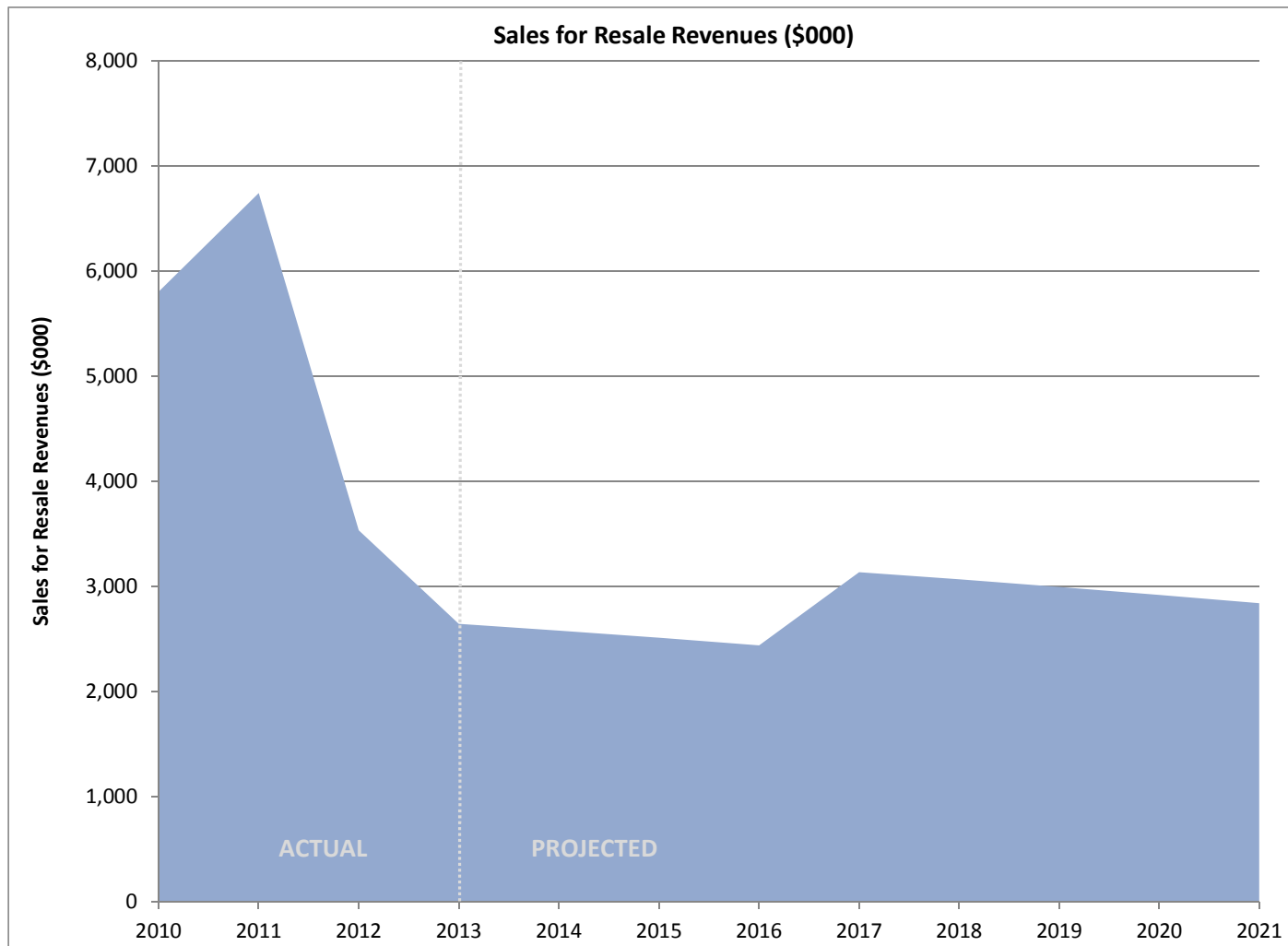
- **10-year Capital Expenditures:**
  - Enloe Dam- \$35.2 million (2013-2016)
  - Transmission - \$17.3 million (\$9 million in 2013-2014 - PT Transmission Line)
  - Substations - \$9.8 million
  - Normal Replacements and Additions - \$24.8 million
  - Other Projects - \$15.3 million
  - Total - \$102.4 million
- **Bond Proceeds - \$64.2 million**
  - 2014 - \$35.2 million for Enloe Dam
  - 2016 - \$29 million for General Capital Improvements
- **Use of Unspent Bond Proceeds- \$7.3 million in 2013**

# Actual / Projected Revenues



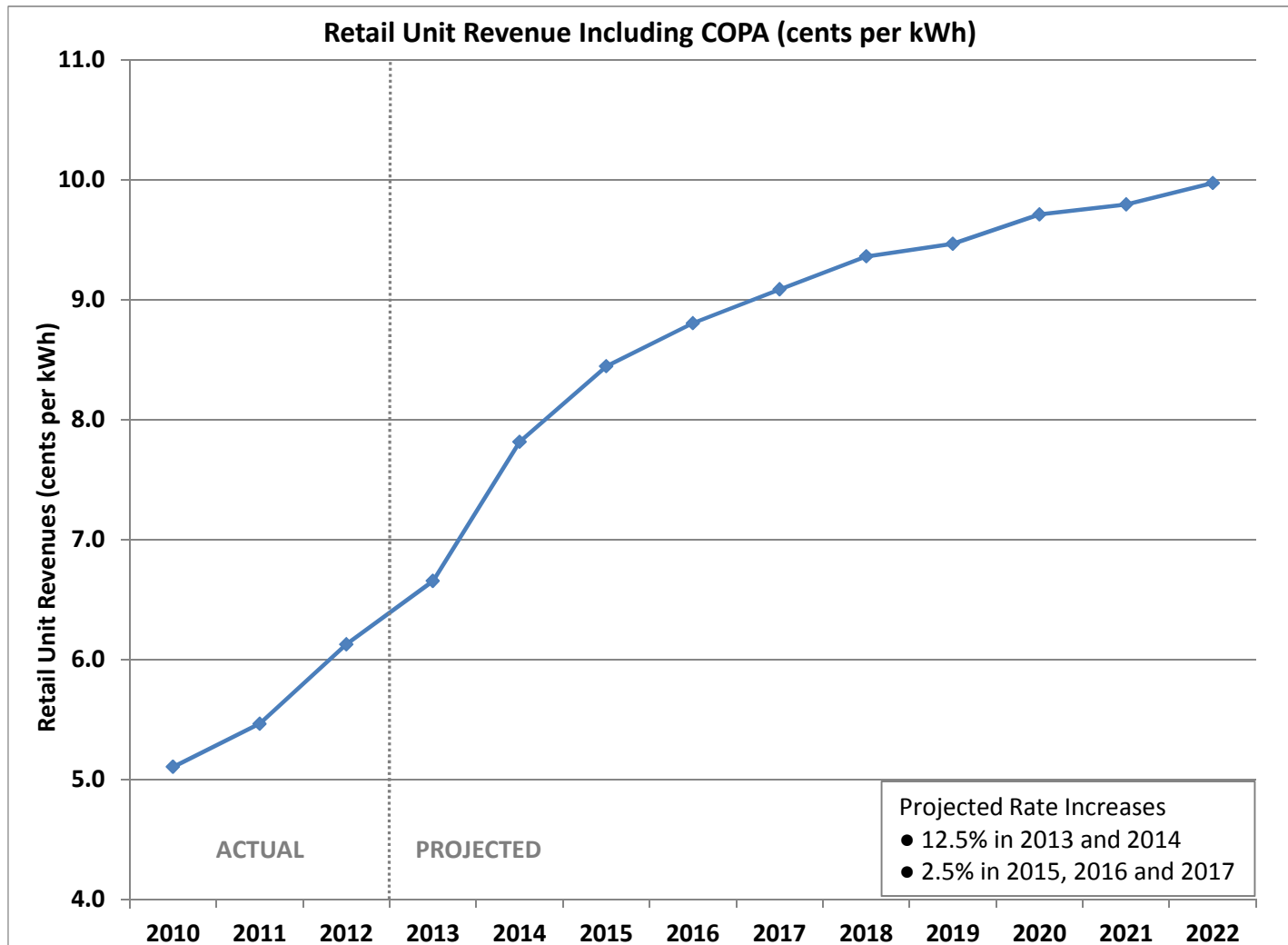


# Sales for Resale Revenues

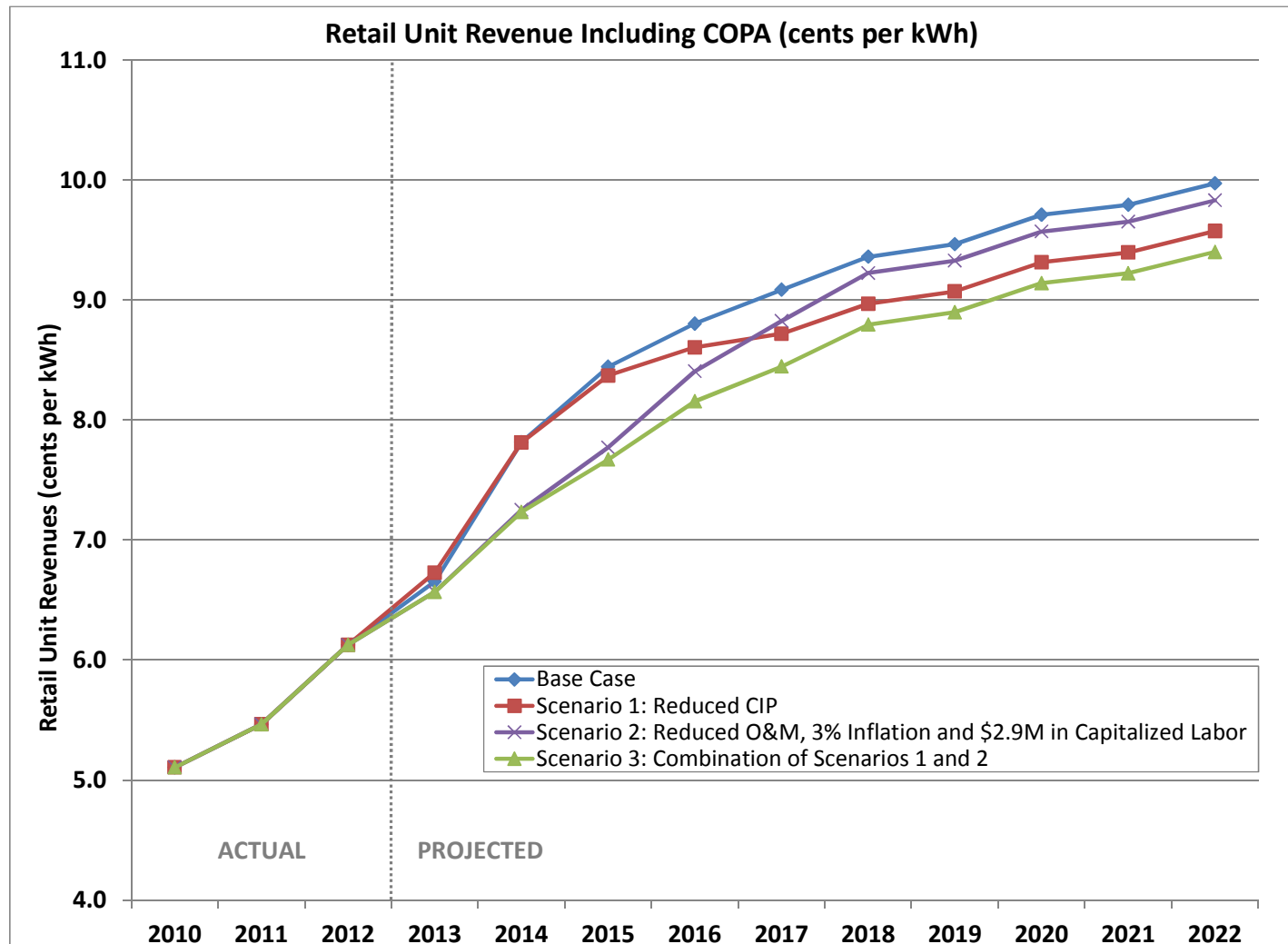


# Final Draft 2013 Equity Management Plan Results

# Base Case Unit Revenues from Retail Sales Including COPA (¢/kWh)



# Comparison of Unit Revenues from Retail Sales Including COPA (¢/kWh)



# EMP Options

Years	Base Case	EMP Option 1	EMP Option 2
2013	12.5%	16.0%	9.5%
2014	12.5%	16.0%	9.5%
2015	2.5%	0.0%	9.5%
2016	2.5%	0.0%	2.0%
2017	2.5%	0.0%	2.0%

# Final Draft 2013 Cost-of-Service and Rate Design Results

# District's TY 2013 Revenue Requirement

Description	Projected Test Year 2013	Pro forma Adjustments (1)	Adjusted Test Year 2013 (2)
Total Revenues From Sales of Electricity	\$40,190,912	\$3,749,759	\$43,940,671
Other Electric Revenues	727,000	-	727,000
Total Revenues	\$40,917,912	\$3,749,759	\$44,667,671
Operating Expenses	\$46,427,249	\$0	\$46,427,249
Other Expenses	1,959,636	0	1,959,636
Total Operating Cost of Service	\$48,386,885	\$0	\$48,386,885
Margins or Increase in Net Assets	(2,798,973)	3,749,759	950,786
Operating Revenue Requirements	\$45,587,912	\$3,749,759	\$49,337,671
Total Non-Operating Revenues	\$4,670,000	\$0	\$4,670,000
Total Revenue Requirements	\$45,587,912	\$3,749,759	\$49,337,671
Less Interest Income	(991,000)	-	(991,000)
Less Contributions in Aid of Construction	(1,104,000)	-	(1,104,000)
Less Use of Rate Stabilization Funds	(2,575,000)	-	(2,575,000)
Less Other Revenues	(727,000)	-	(727,000)
Less Wholesale Revenues	(2,640,925)	-	(2,640,925)
Revenue Requirements from Rates	\$37,549,988	\$3,749,759	\$41,299,746
Revenue Increase (Decrease)	-		\$3,749,759
Percent Change	-		10.4%
Debt Service Coverage Ratio (DSC)	0.83		1.91
TIER (Operating)	(2.94)		(0.94)
TIER (Total)	(0.49)		1.51

## Notes

(1) Assumes retail revenue increase equal of 12.5% effective for a 10 month period.

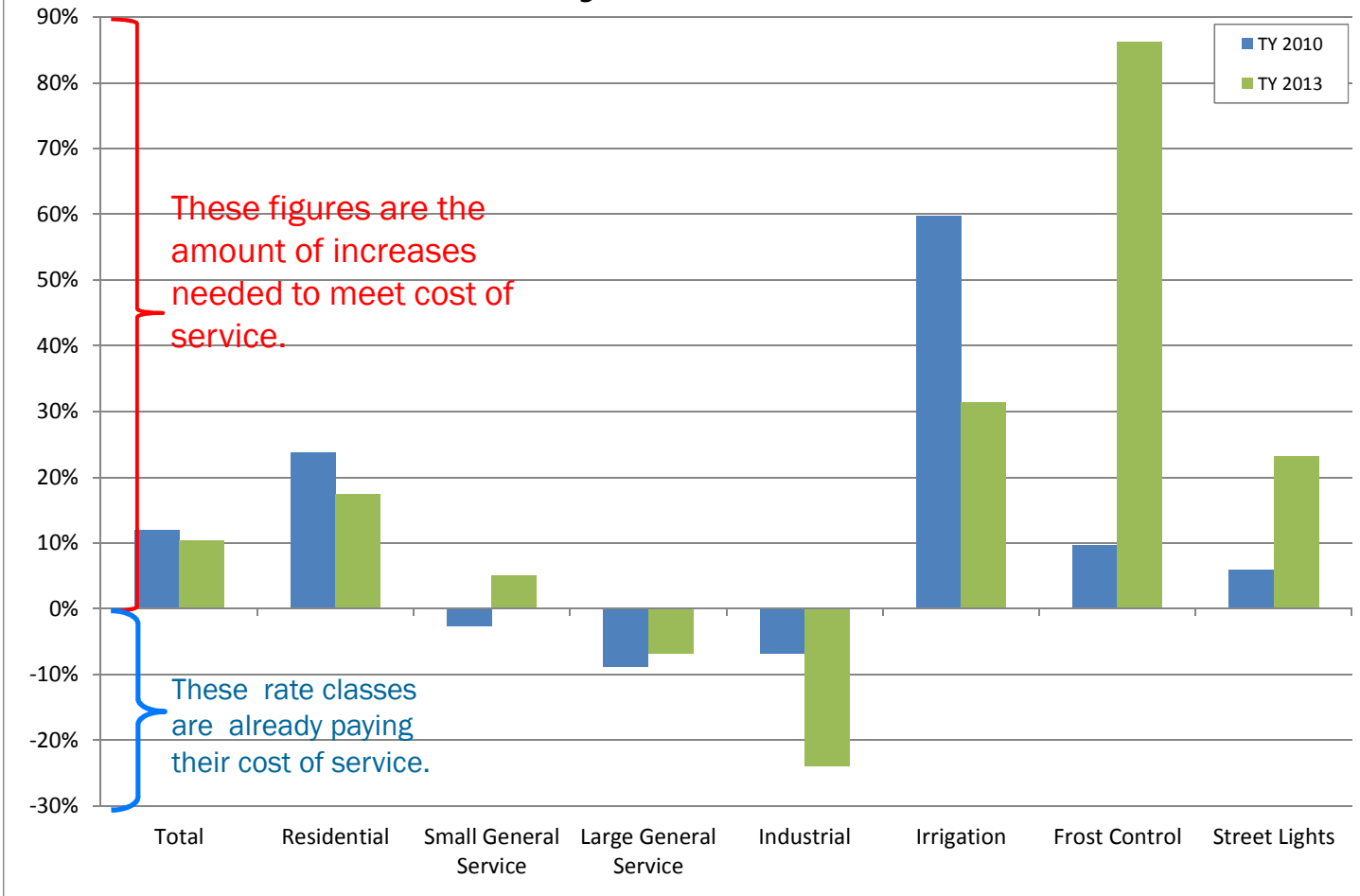
(2) The rate stabilization funds are used to meet the minimum 1.25 debt service coverage requirement.

Financial metrics in the adjusted test year 2013 column reflect a rate increase for a 10 month period.

# Draft Cost-of-Service Results

Percent of change needed to reach COS

Percent Change in Retail Rate Revenues to Reach COS Levels  
Average and Excess Method





# TY 2013 COS Results – A&E Method Unit Costs

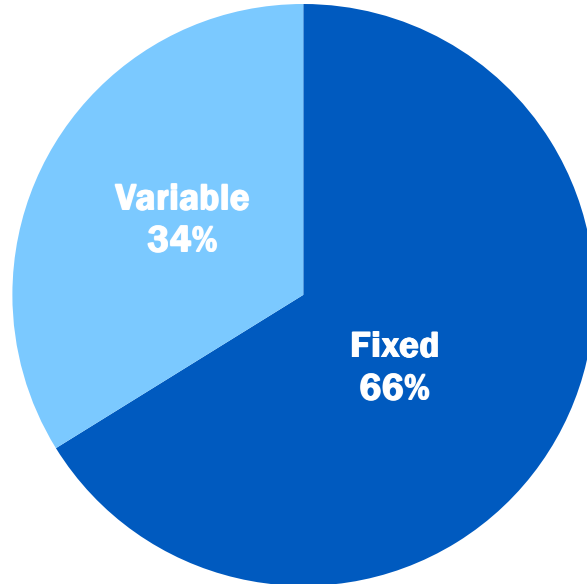
## Base Case

### Average and Excess Method Unit Costs

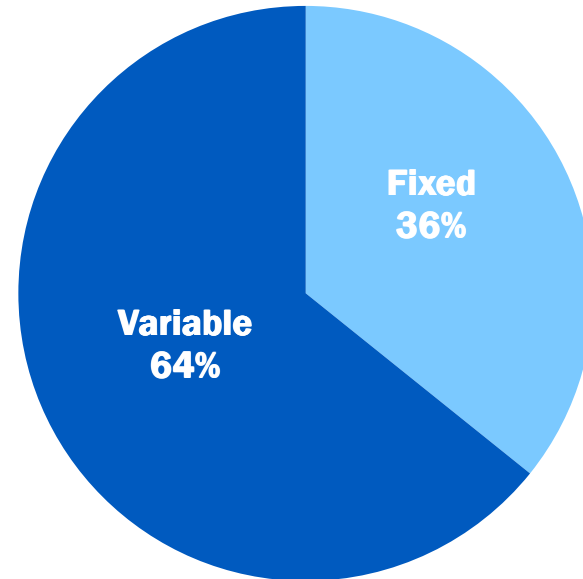
	Residential	Small General Service	Large General Service	Industrial	Irrigation	Frost Control	Street Lights
<b>Unit Costs not including Sales for Resale</b>							
Customer - \$/Customer-Month	\$28.07	\$32.73	\$41.62	\$41.86	\$41.34	\$42.00	\$14.92
Energy - \$/kWh	0.06501	0.06145	0.02903	0.02903	0.02903	0.02903	0.12781
Demand - \$/kW-Month	n/a	n/a	\$9.83	\$5.84	\$11.76	\$11.31	n/a
Fixed Costs (\$/Customer-Month)	\$79.80	\$102.10	\$1,406.64	\$9,911.31	\$312.02	\$860.29	\$547.93
Variable Costs (\$/kWh)	0.02903	0.02903	0.02903	0.02903	0.02903	0.02903	0.02903
<b>Unit Costs including Sales for Resale</b>							
Energy - \$/kWh	0.05993	0.05684	0.02542	0.02612	0.02485	0.00707	0.11997
Variable Costs (\$/kWh)	0.02395	0.02441	0.02542	0.02612	0.02485	0.00707	0.02118

# 2013 Residential Costs and Revenues

Costs

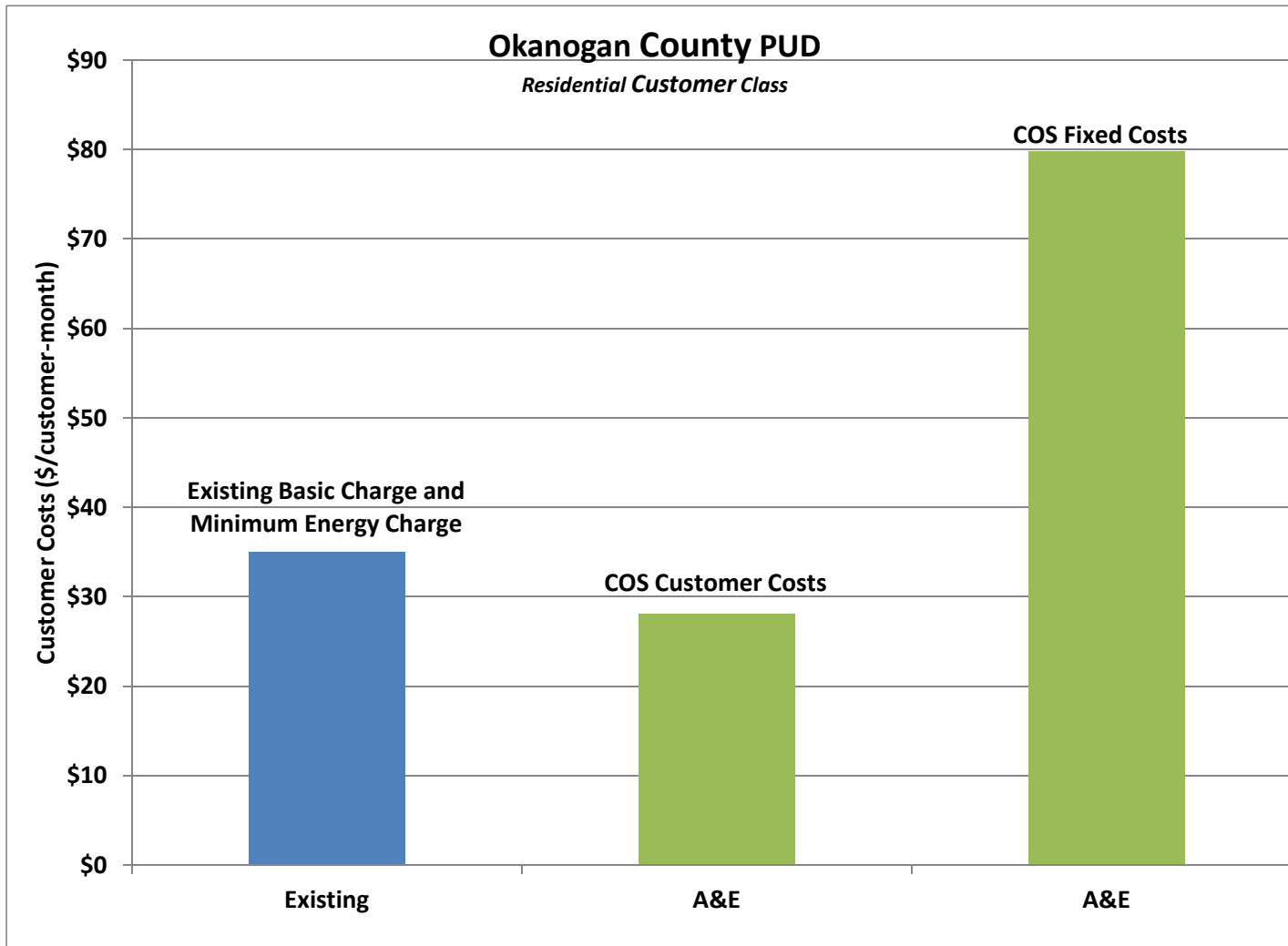


Revenues\*



Note: Based on estimated revenues under existing rates.

# Comparison of Unit Costs to Existing Rates



# Principles Used in Rate Design

- **Promote revenue stability**
- **Reflect the cost of providing services**
- **Easily understood by customers**
- **Promote rate continuity over time**
- **Fair, equitable and non-discriminatory test**
- **Easy to administer**
- **Promote efficient use of electricity**
- **Meet and reflect utility's policy objectives**

# Rate Design Options Being Considered

- Rates reflect 3 x 9.5% annual across-the-board increases
- Use of rate stabilization funds in 2013 and 2014
- Two rate options for residential class:
  - Option 1: No Minimum Energy Charge (MEC) allowance for Residential and Small General customer classes.
  - Option 2: Two year phase out of Residential and Small General Service MEC allowance
    - No change in Energy Charges for Residential for 2013-2018
    - No change in the Energy Charge for Small General Service for 2013-2014
- Change from horsepower to demand charge for Frost Control

# Rate Option 1

Schedule No. 2 - Residential	Existing Rates	TY 2013 Cost of Service (1)	Proposed Rates (2)		
			September 2013	July 2014	July 2015
<u>Base Rates</u>					
Basic Charge (\$/month)	\$10.00	\$28.07	\$35.00	\$40.00	\$45.00
Energy Charge (\$/kWh)					
< 2,000 kWh	\$0.05750	\$0.05993	\$0.04350	\$0.04657	\$0.05023
> 2,000 kWh	\$0.06316	\$0.05993	\$0.06316	\$0.06762	\$0.07293
Minimum Charge (\$/month)	n/a	\$79.80	n/a	n/a	n/a
Minimum Energy Charge (\$/month)	\$25.00	n/a	n/a	n/a	n/a
kWh in Basic Charge	500		n/a	n/a	n/a
Percent Change in Base Rate Revenue		17.4%	9.5%	9.5%	9.5%
<u>Cost of Power Adjustment</u>	\$0.00240	n/a	\$0.00265	\$0.00501	\$0.00579

## Notes

- (1) Cost of service rates include allocation of wholesale revenues.
- (2) Set the Basic Charge to \$35 per month in 2013 and increased this to \$45 per month by 2015.

Energy Charge applied to all kilowatt-hours in 2013 and beyond.

No change in the Energy Charge for usage above 2,000 kilowatt-hours in 2013. Decreased the Energy Charge applied to the first 2,000 kilowatt-hours in 2013 to offset the bill impacts from eliminating the minimum energy allowance (first 500 kilowatt-hours). Adjusted the Energy Charge as necessary to collect sufficient revenues for all other years. The Energy Charge for usage above 2,000 kilowatt-hours in 2014 and on is adjusted to maintain the same rate ratio between the lower and higher usage blocks.

# Rate Option 2

Schedule No. 2 - Residential	Existing Rates	TY 2013 Cost of Service (1)	Proposed Rates (2)		
			September 2013	July 2014	July 2015
<u>Base Rates</u>					
Basic Charge (\$/month)	\$10.00	\$28.07	\$35.00	\$35.00	\$40.00
Energy Charge (\$/kWh)					
< 2,000 kWh	\$0.05750	\$0.05993	\$0.05750	\$0.05750	\$0.05750
> 2,000 kWh	\$0.06316	\$0.05993	\$0.06316	\$0.06316	\$0.06316
Minimum Charge (\$/month)	n/a	\$79.80	n/a	n/a	n/a
Minimum Energy Charge (\$/month)	\$25.00	n/a	n/a	n/a	n/a
kWh in Basic Charge	500		250	0	n/a
Percent Change in Base Rate Revenue		17.4%	12.7%	12.5%	4.2%
<u>Cost of Power Adjustment</u>	\$0.00240	n/a	\$0.00265	\$0.00501	\$0.00579

## Notes

- (1) Cost of service rates include allocation of wholesale revenues.
- (2) Set the Basic Charge to \$35 per month in 2013 and is increased to \$40 per month by 2015.  
Energy Charge applied after the first 250 kilowatt-hours in 2013 and to all kilowatt-hours in 2014 and beyond.  
No changes in the Energy Charge.

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