

2017 Budget

Rates

(Step 3 of 3)

The Budget Process

Each year, in November, OPALCO staff prepare a budget for the following year. There are three elements of the budget:

- Load Forecast
- Budget
- Rates

See Part 1 for the **Load Forecast**, which models the anticipated weather to predict how much energy will be needed.

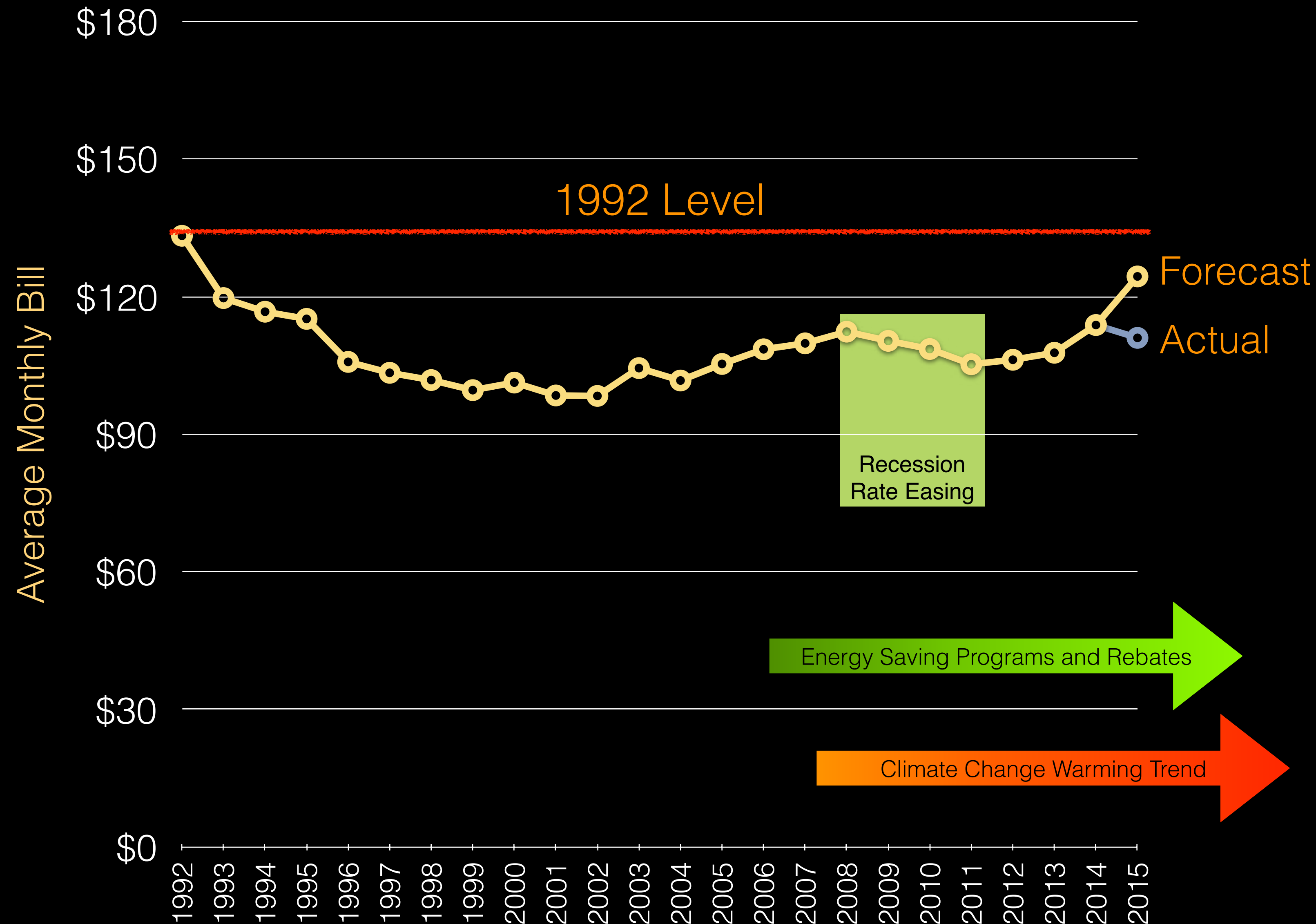
See Part 2 – **Budget**, for anticipated expenses and revenue for operations and capital projects.

The following section shows how **Rates** are set to produce enough revenue to cover expenses, given the anticipated kWh sales from the **Load Forecast**.

Rule of Thumb

each 1% rate increase =
\$250,000 in revenue

History of 1,000 kWh Monthly Bill Inflation Adjusted

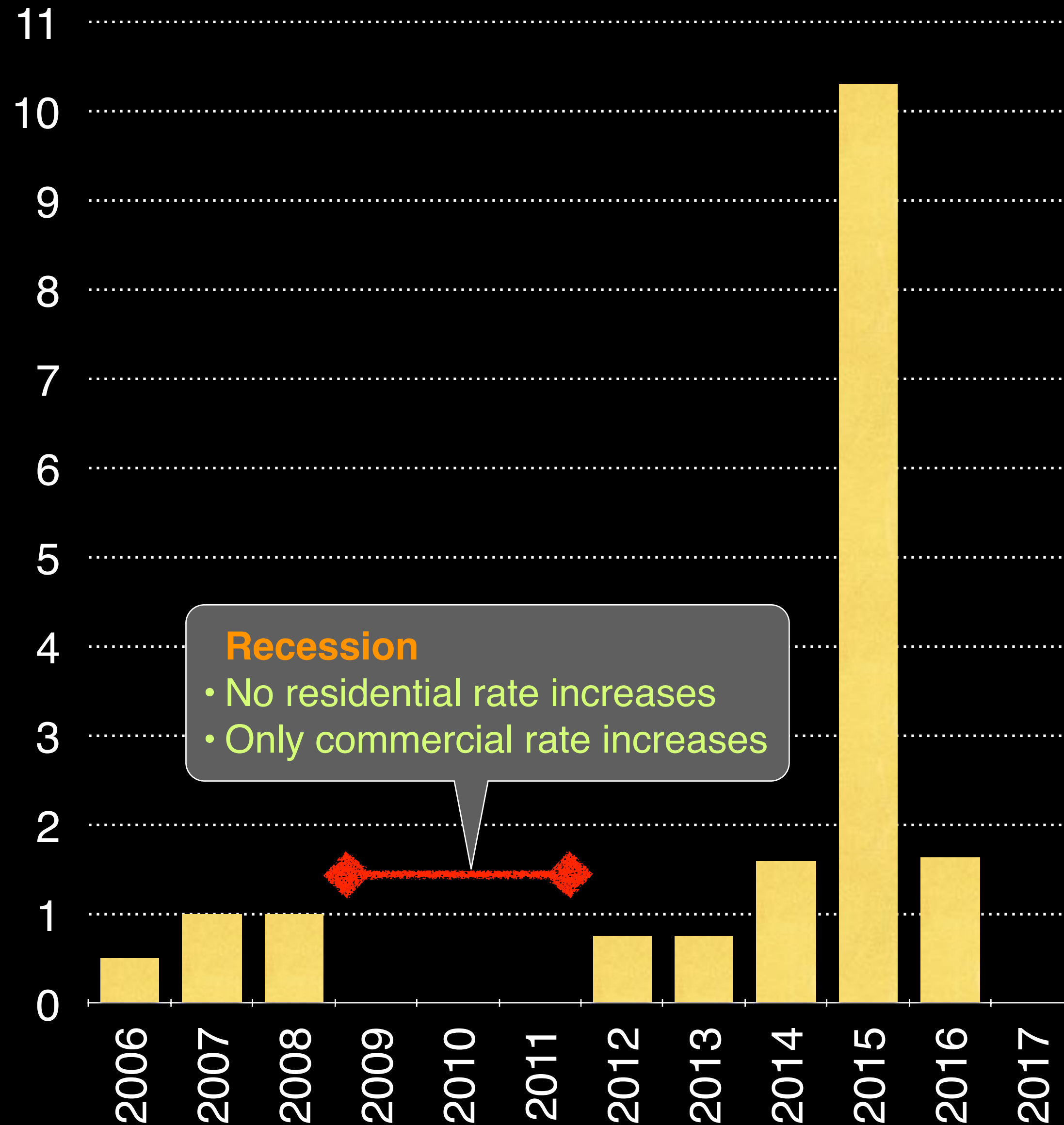


Rates have not kept up with inflation. Adjusting for inflation, the average member bill is a bit less than it was 24 years ago.

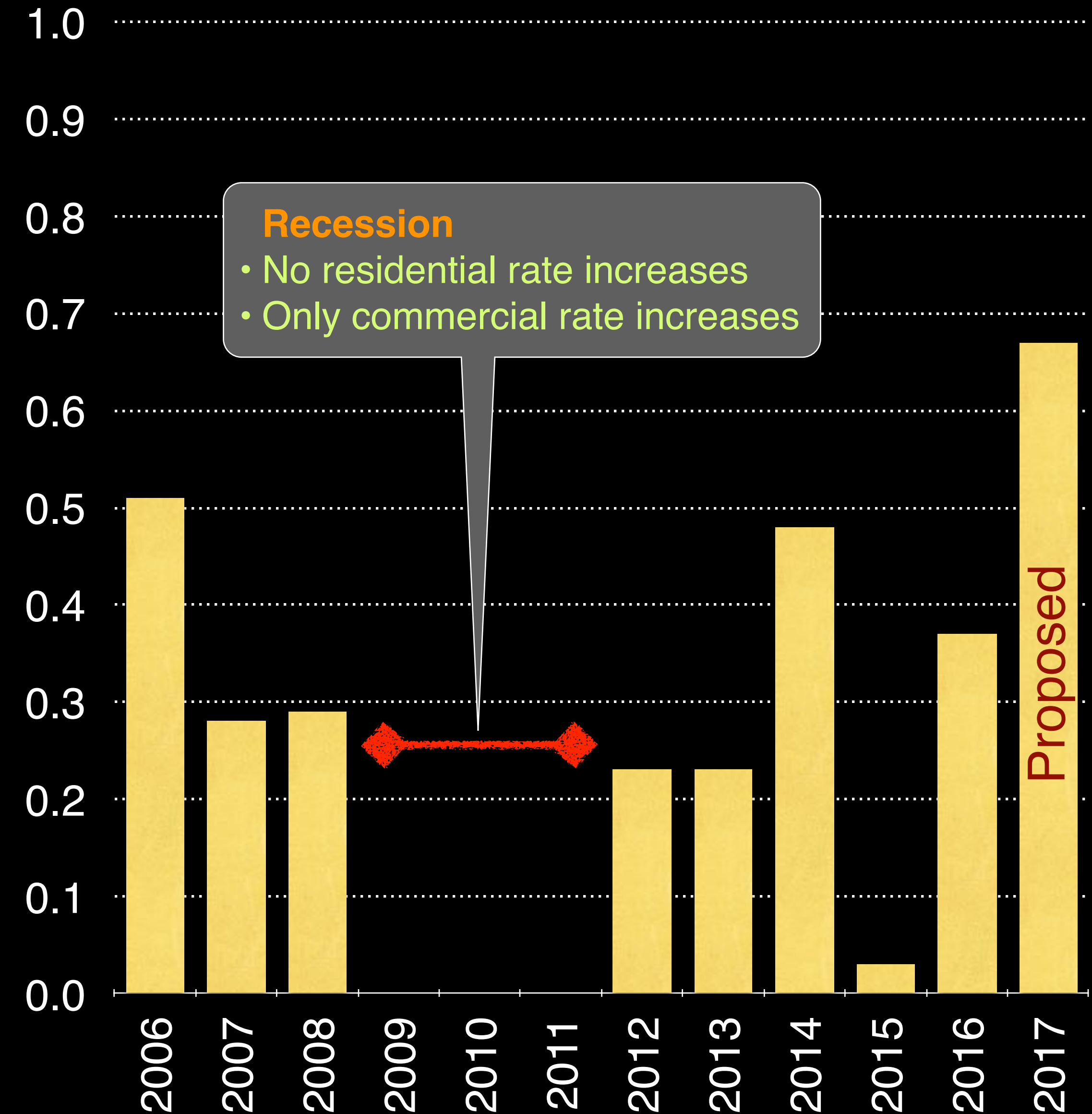
The next slide shows how the co-op postponed residential rate increases during the peak of the recession, to ease member finances.

Residential Rate History: Monthly Facility Charge and Usage

Facility Charge Change (\$)



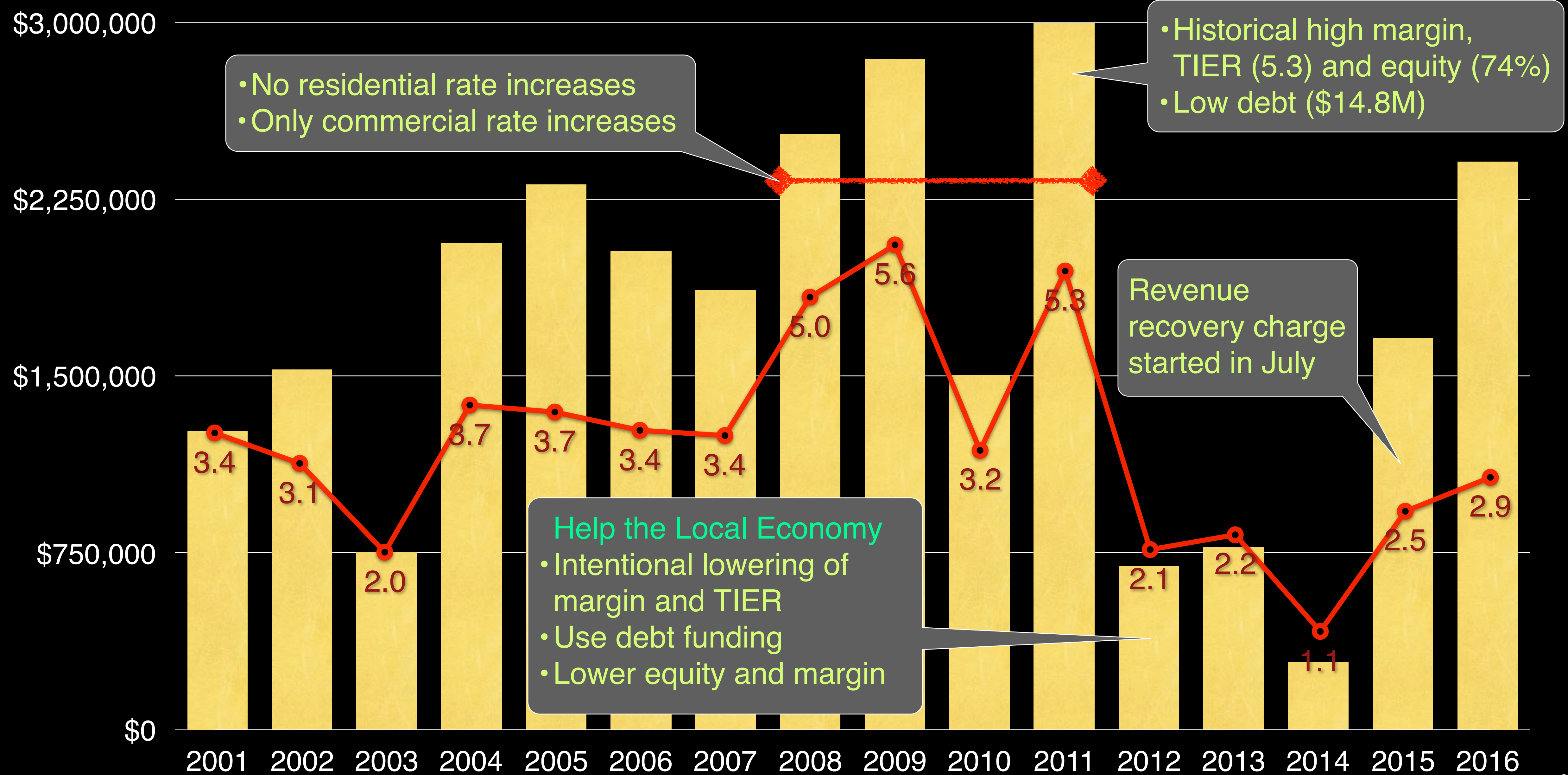
kWH Charge Change (¢)



In addition to postponing rate increases during the recession, in 2012, the board voted to help the local economy by intentionally lowering co-op margin and TIER and using debt funding.

The next slide shows how this helped keep member money in their pockets rather than in co-op equity reserves.

Net Operating Margin (yellow) and TIER (red line)



The average co-op member uses about 1,000 kWh per month (more in winter, less in summer).

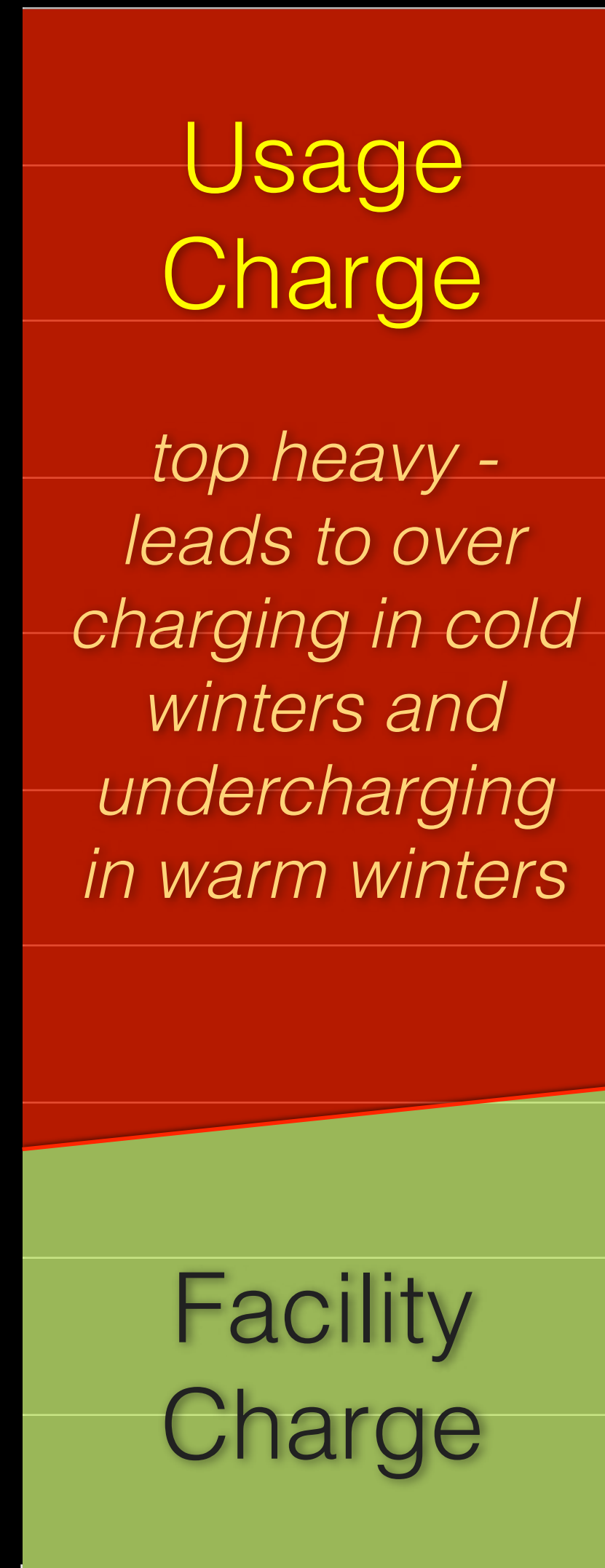
In warmer years, electric bills are less, due to lower kWh sales, resulting in a potential deficit for the co-op.

In a colder years, bills are typically higher, resulting in a potential surplus.

Rates consist of a **facility charge** and a **usage charge**. The next two slides show how revenue volatility can be balanced using rates.

Billed Versus Actual Cost as a % of Total Cost

Typical OPALCO
Residential Bill

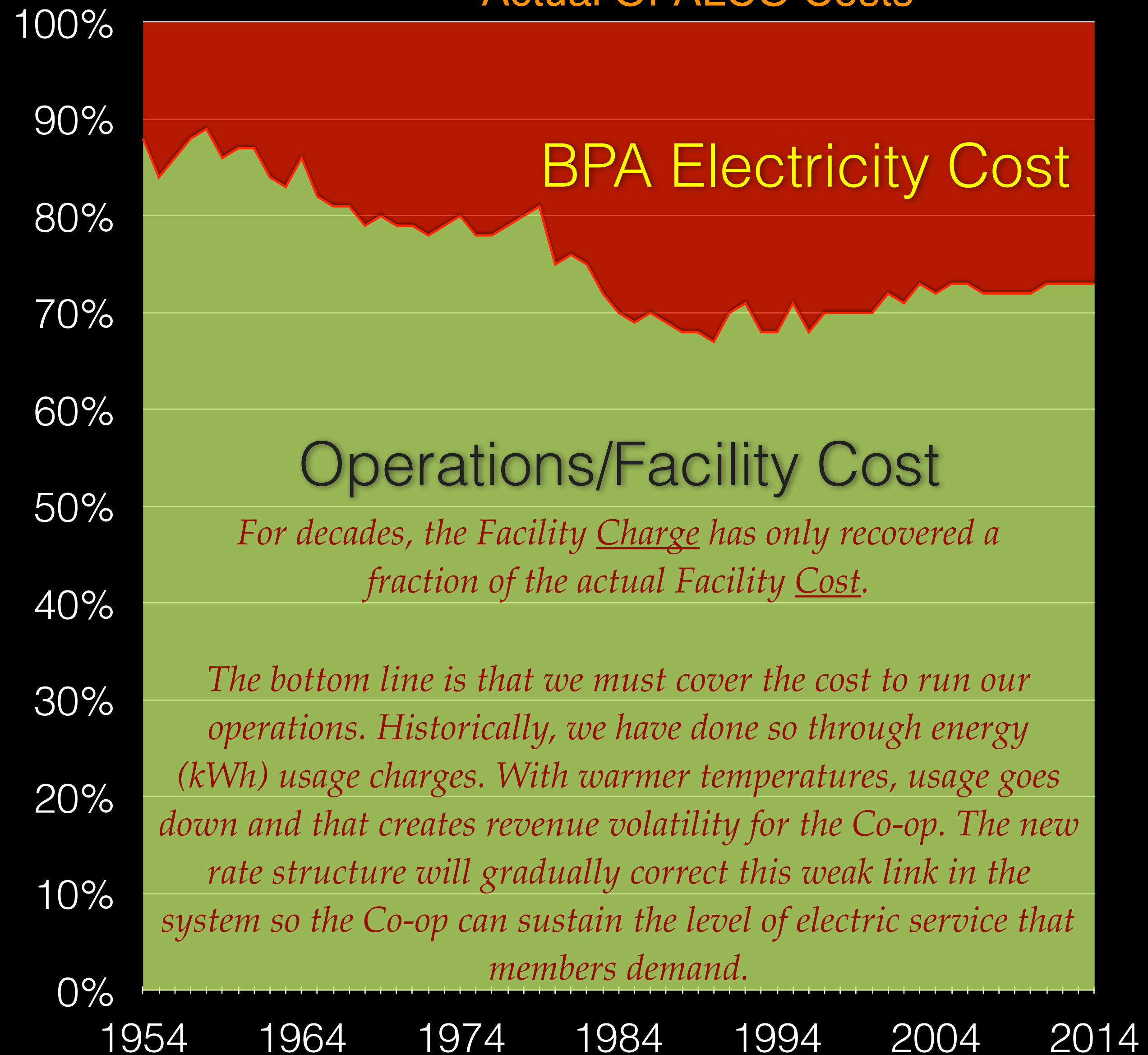


*top heavy -
leads to over
charging in cold
winters and
undercharging
in warm winters*

Rule of Thumb

$$\text{Bill} = \text{Rates} \times \text{Weather}$$

Actual OPALCO Costs



BPA Electricity Cost

Operations/Facility Cost

For decades, the Facility Charge has only recovered a fraction of the actual Facility Cost.

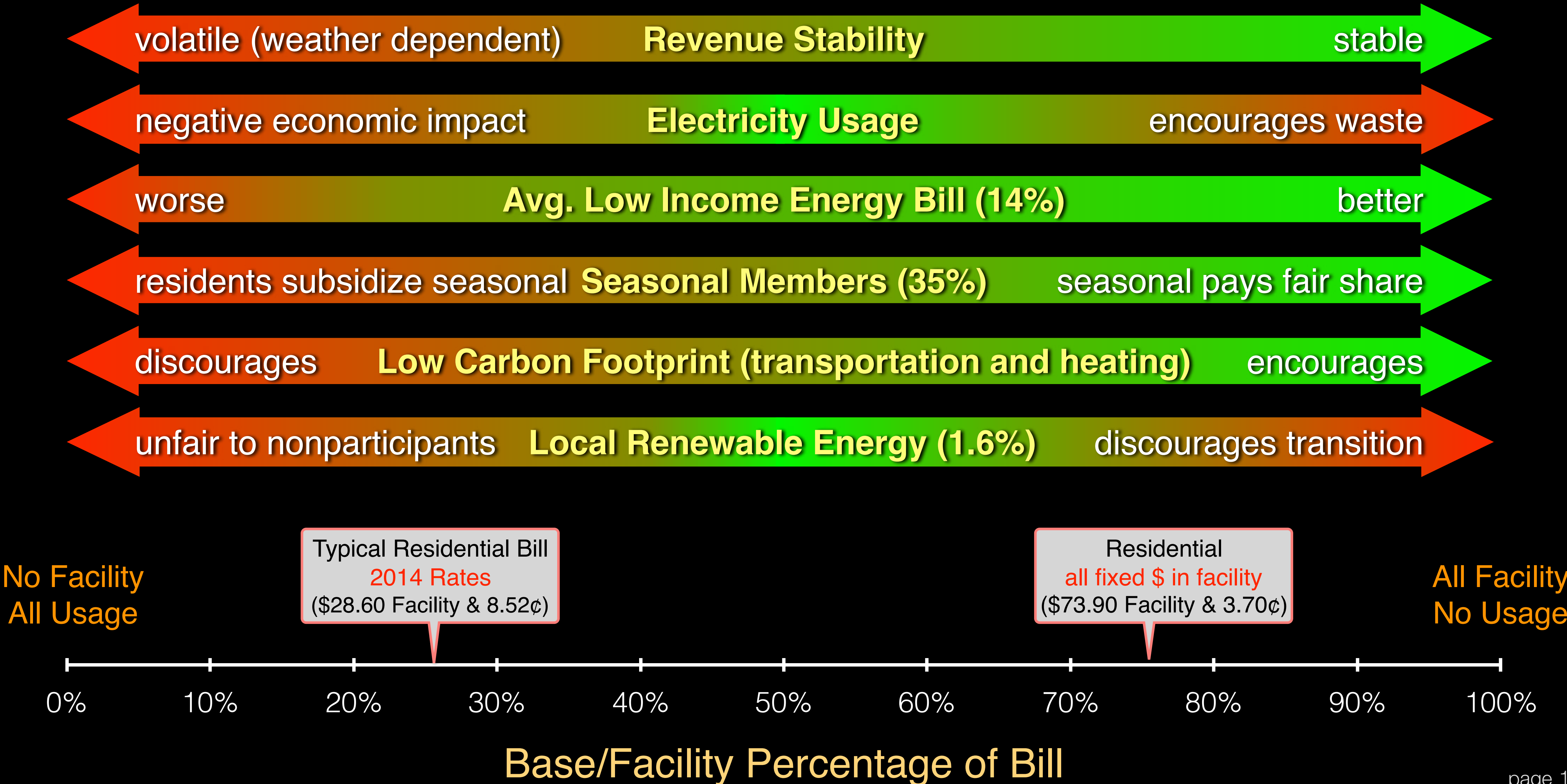
The bottom line is that we must cover the cost to run our operations. Historically, we have done so through energy (kWh) usage charges. With warmer temperatures, usage goes down and that creates revenue volatility for the Co-op. The new rate structure will gradually correct this weak link in the system so the Co-op can sustain the level of electric service that members demand.

OPALCO endeavors to balance the **facility** and **usage charges** to make sure each member pays their fair share for the cost of the grid, while keeping service reliable and usage affordable compared to other forms of energy.

About 35% of co-op members are seasonal and set their thermostats back when they are away in the winter. This means that the **facility cost** is disproportionately borne by year-round members, due to the **facility charge** under-representing the actual **facility cost** and making the difference up in a higher **usage charge**.

The next slide shows how varying the mix of **facility** and **usage charges** effects things like seasonal owners, weather volatility, consumption, low income members, carbon footprint, and renewable energy member generators.

OPALCO Facility Charge Analysis

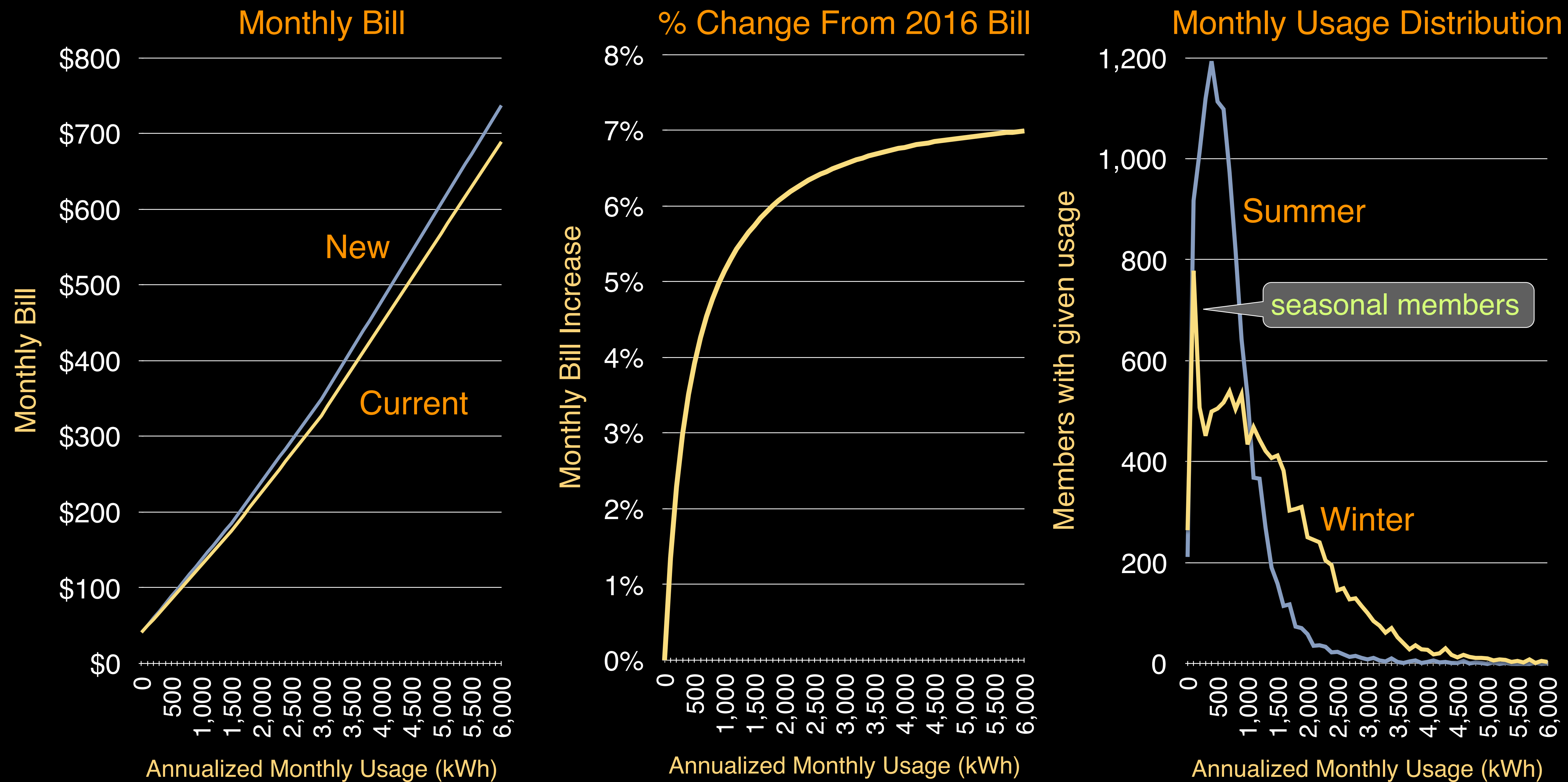


Based on the load forecast and budget for 2017, the next slides show how OPALCO's proposed 2017 rates will flow through to member bills, based on monthly kWh usage.

Because the rate change is made only to the **usage charge**, smaller users of energy experience a proportionately smaller increase in their electric bill.

Also, in the chart on the right (Monthly Usage Distribution), note the spike in low energy winter members. These are mostly seasonal members who have set their thermostats very low and shut their lights off.

Residential Rate Analysis: Current and 2017 Rate Plan



2017 Residential Rate Proposals

Residential	Present Rates	Recommended Increase applied to energy only (kWh)	5% Increase to All Components
Facility Rate (\$/Service/Month)	\$40.54	\$40.54	\$42.57
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0000	\$0.0005
Energy Rates (\$/kWh)			
Summer Block 1 (< 1,500 kWh)	\$0.0892	\$0.0959	\$0.0937
Summer Block 2 (1,500 kWh to 3000 kWh)	\$0.1011	\$0.1087	\$0.1062
Summer Block 3 (> 3,000 kWh)	\$0.1200	\$0.1289	\$0.1260
Winter Block 1 (< 3,000 kWh)	\$0.0892	\$0.0959	\$0.0937
Winter Block 2 (3,000 kWh to 5,000 kWh)	\$0.1011	\$0.1087	\$0.1062
Winter Block 3 (> 5,000 kWh)	\$0.1200	\$0.1289	\$0.1260

Residential TOU	Present Rates	Recommended Increase applied to energy only (kWh)	5% Increase to All Components
Facility Rate (\$/Service/Month)	\$45.99	\$45.99	\$48.29
Demand Rate (\$/Service/Month)			
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005	\$0.0005
Energy Rates (\$/kWh)			
TOU Period 1 (6 AM - Noon)	\$0.1513	\$0.1637	\$0.1589
TOU Period 2 (Noon - 6 PM)	\$0.0935	\$0.0982	\$0.0982
TOU Period 3 (6 PM - 8 PM)	\$0.1513	\$0.1637	\$0.1589
TOU Period 3 (8 PM - 6 AM)	\$0.0410	\$0.0431	\$0.0431

2017 Commercial Rate Proposals

		Recommended Increase applied to energy only (kWh)	5% Increase to All Components
Small Commercial (<20 kW)	Present Rates		
Facility Rate (\$/Service/Month)	\$57.65	\$57.65	\$60.53
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005	\$0.0005
Energy Rates (\$/kWh)			
Block 1 (< 5,000 kWh)	\$0.0904	\$0.0976	\$0.0949
Block 2 (> 5,000 kWh)	\$0.1009	\$0.1090	\$0.1059
Demand Rates (\$/kW)			
First 20 kW (Flat Rate)	\$5.25	\$5.66	\$5.51
		Recommended Increase applied to energy only (kWh)	5% Increase to All Components
Large Commercial (> 20kW)	Present Rates		
Facility Rate (\$/Service/Month)	\$57.65	\$57.65	\$60.53
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005	\$0.0005
Energy Rates (\$/kWh)			
Block 1 (< 5,000 kWh)	\$0.0820	\$0.0864	\$0.0861
Block 2 (5,000-150,000 kWh)	\$0.0907	\$0.0957	\$0.0952
Block 3 (>150,000 kWh)	\$0.1211	\$0.1277	\$0.1272
Demand Rates (\$/kW)			
Block 1 (< 300 kW)	\$3.31	\$3.49	\$3.48
Block 2 (> 300 kW)	\$4.97	\$5.24	\$5.22

2017 Pump Rate Proposals

Pumps	Recommended		
	Present Rates	5% Increase to All Components	Increase applied to energy only (kWh)
Facility Rate (\$/Service/Month)	\$36.12	\$37.93	\$36.12
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005	\$0.0005
Energy Rates (\$/kWh)			
0 - 370 kWh	\$0.0960	\$0.1008	\$0.1109
370-5,000 kwh	\$0.0833	\$0.0875	\$0.0963
Over 5,000 kWh	\$0.0935	\$0.0982	\$0.1081
Demand Rates (\$/kW)			
First 20 kW (Flat Rate)	\$1.00	\$1.05	\$1.05
Over 20 kW	\$3.31	\$3.48	\$3.83