Rates & Bill Comparisons

Presented to the Independence Public Utilities Advisory Board

September 19, 2019

Presentation Sections

Part 1 – Who are IPL customers?

Part 2 – How do seasons and usage affect your bill?

Part 3 – How do bills compare?

Presentation Sections

Part 1 – Who are IPL customers?

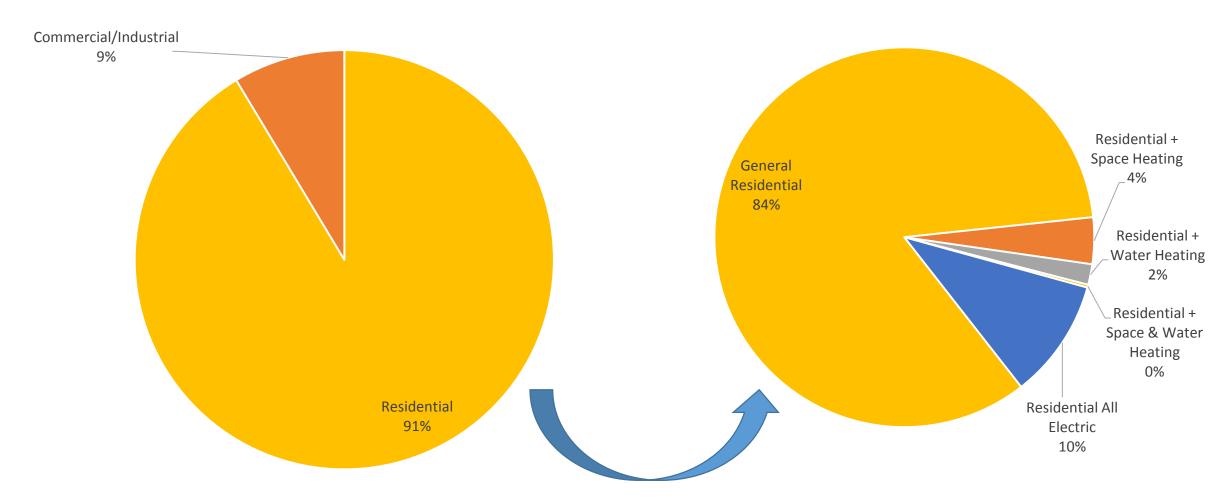
Part 2 – How do seasons and usage affect your bill?

Part 3 – How do bills compare?

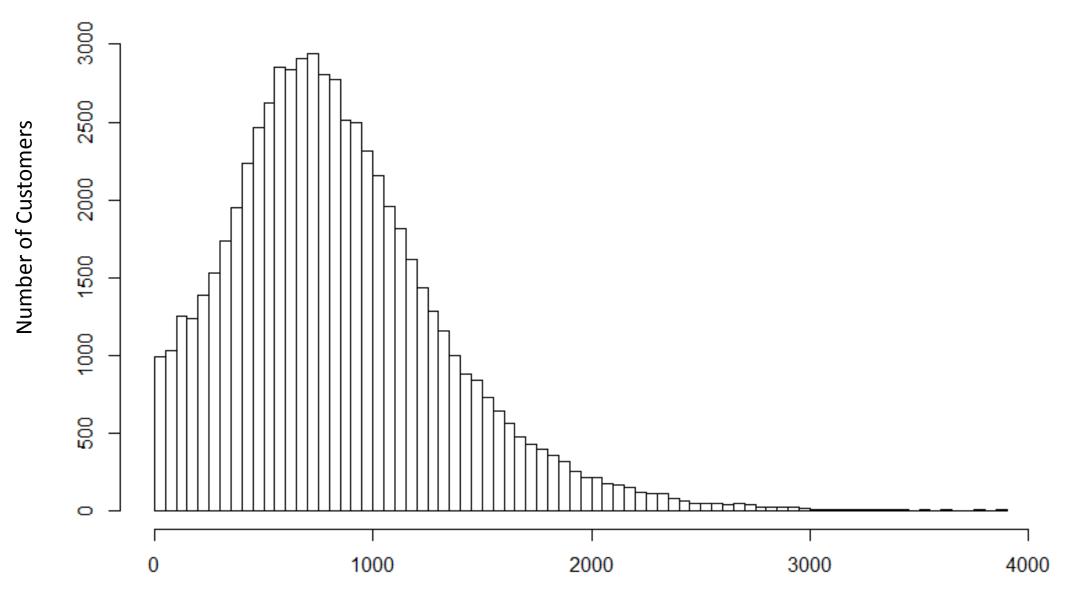
Customer Overview



Share of Residential Customers

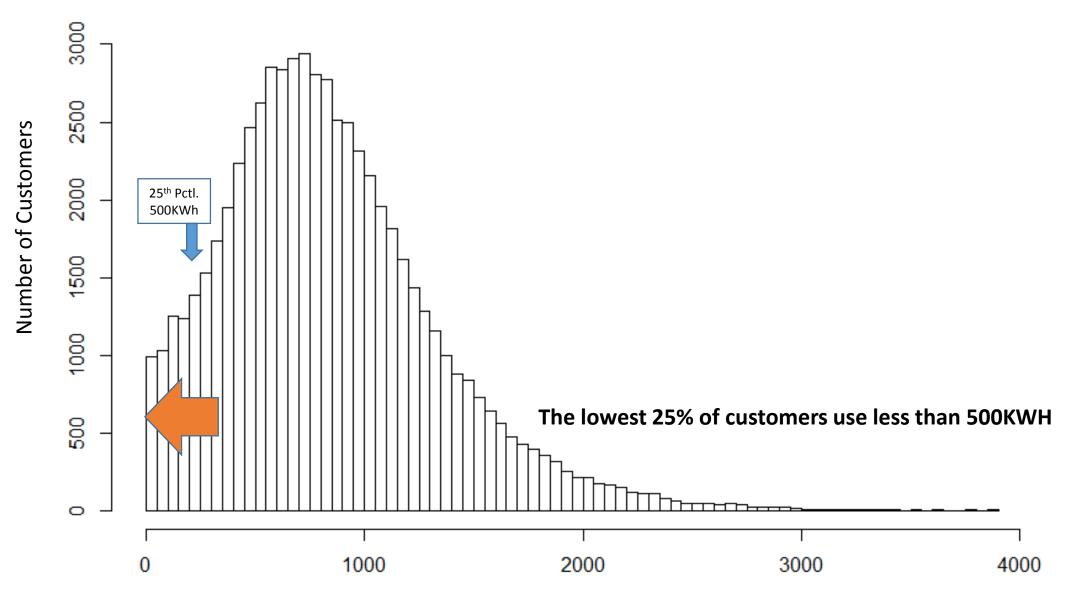


Distribution of Usage for Residential Customers

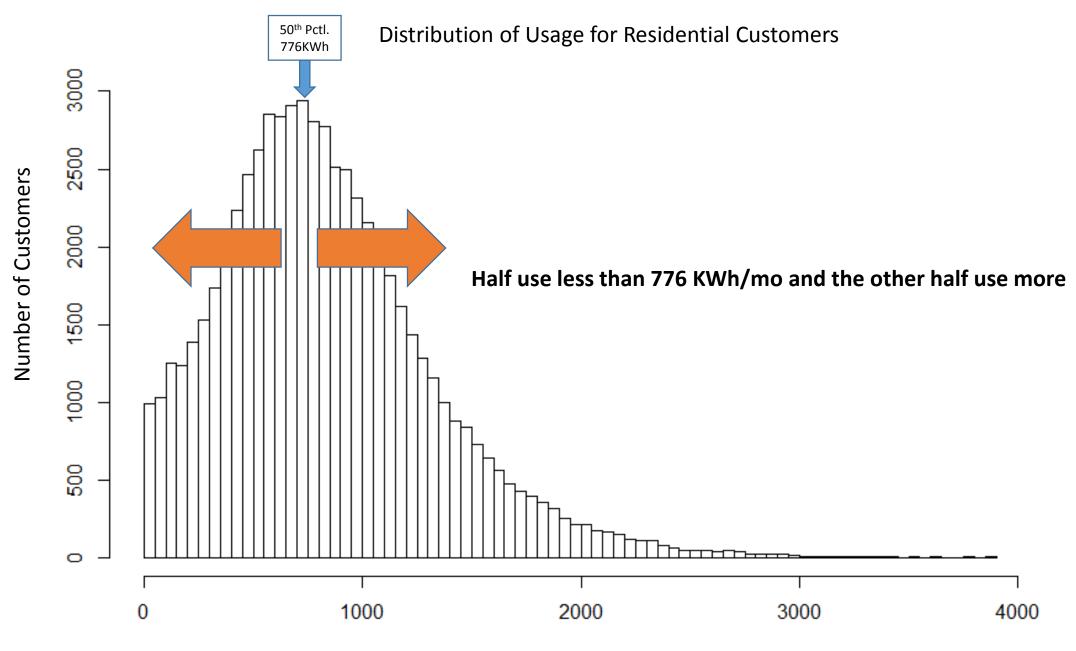


Average Usage by Independence Residential Customer (KWh/mo)

Distribution of Usage for Residential Customers

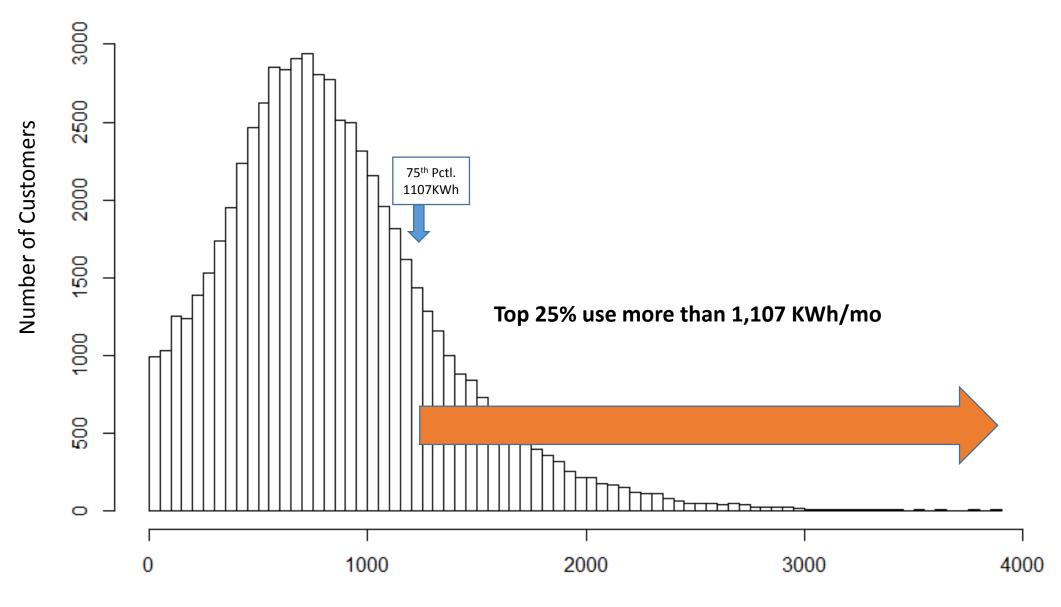


Average Usage by Independence Residential Customer (KWh/mo)

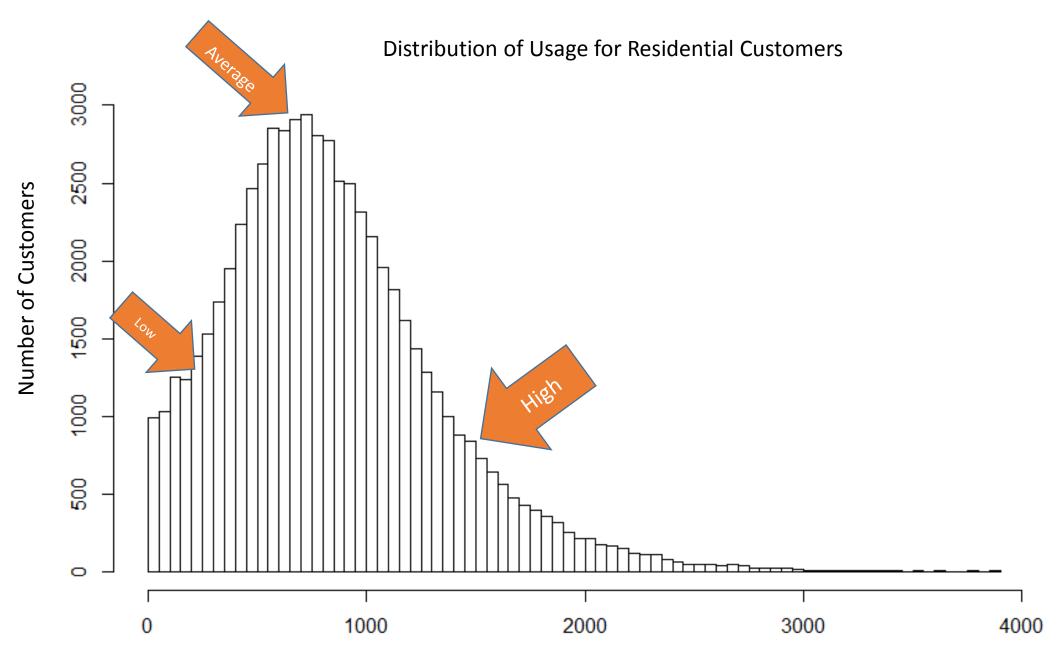


Average Usage by Independence Residential Customer (KWh/mo)

Distribution of Usage for Residential Customers



Average Usage by Independence Residential Customer (KWh/mo)



Average Usage by Independence Residential Customer (KWh/mo)

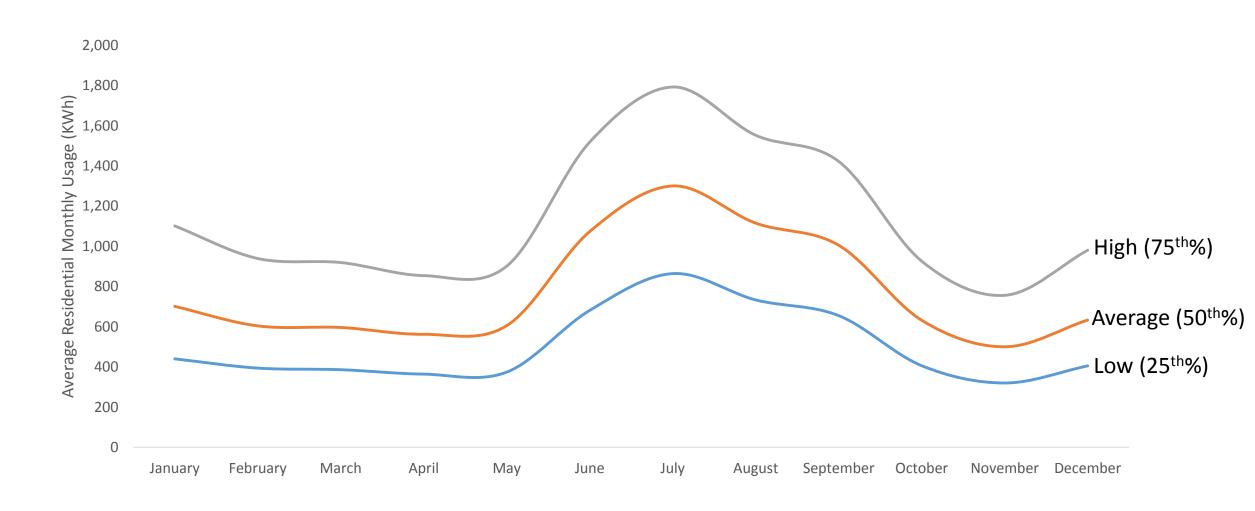
Presentation Sections

Part 1 – Who are IPL customers?

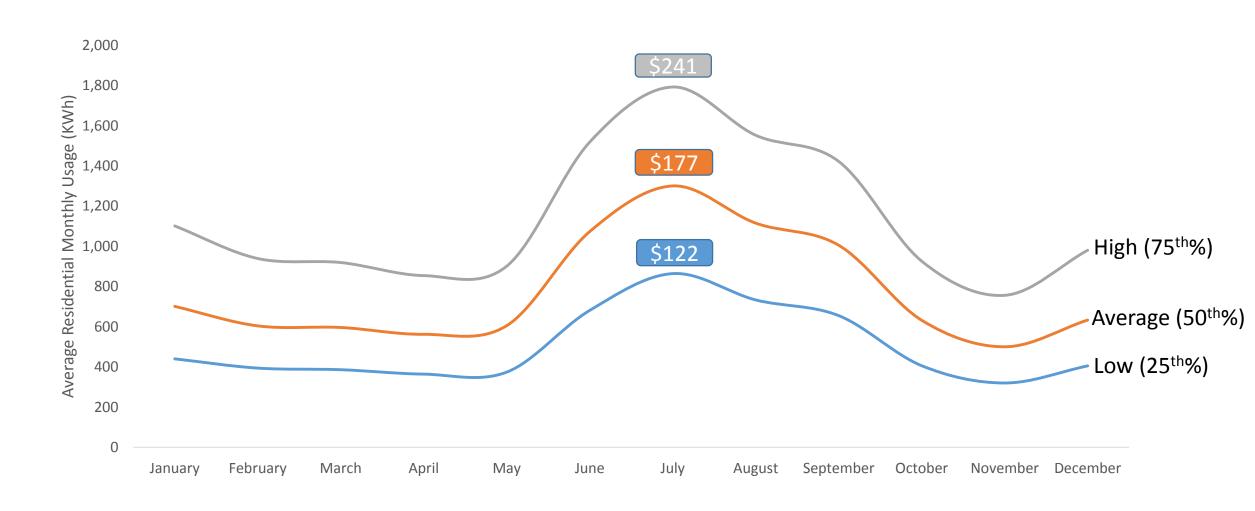
Part 2 – How do seasons and usage affect your bill?

Part 3 – How do bills compare?

Season and Usage



Season and Usage



Let's Review Part 1 & 2

• The majority of IPL customers are Residential

Your bill will vary significantly throughout the year based on usage

 Your bill might be really different from your neighbors' bill depending on how much electricity each of you uses

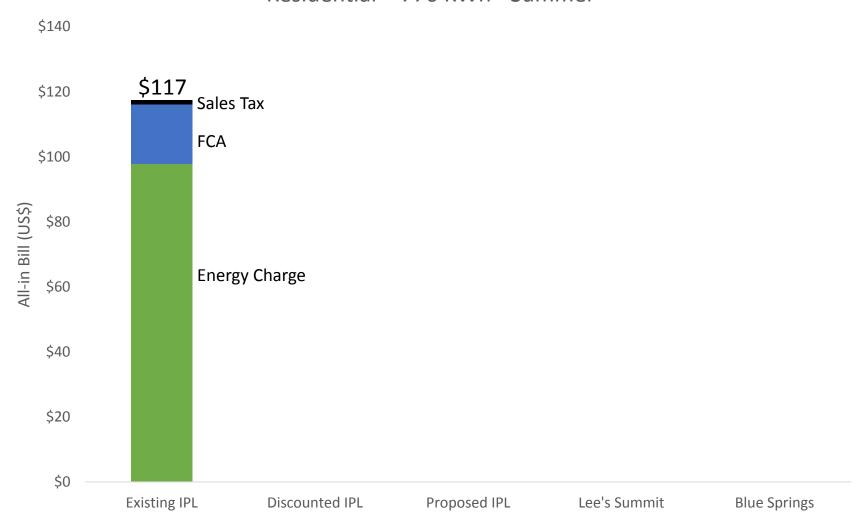
Presentation Sections

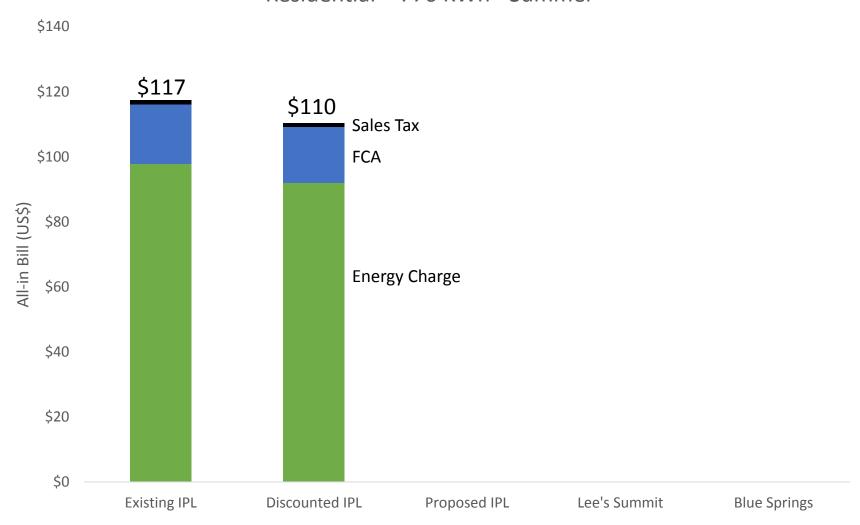
Part 1 – Who are IPL customers?

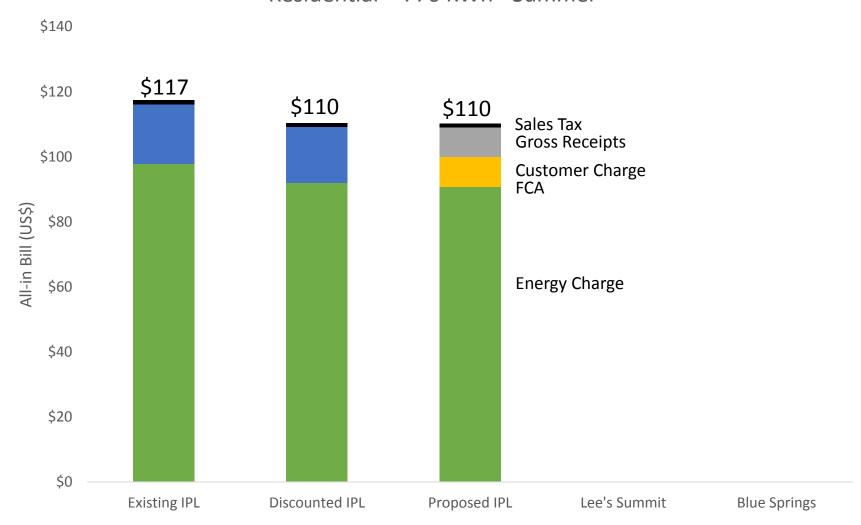
Part 2 – How do seasons and usage affect your bill?

Part 3 – How do bills compare?

- Customer Charge
- Energy Charge
- Fuel Cost Adjustment
- Additional Riders (aka Charges)
- PILOT/Franchise Fee/Gross Receipts
- Taxes



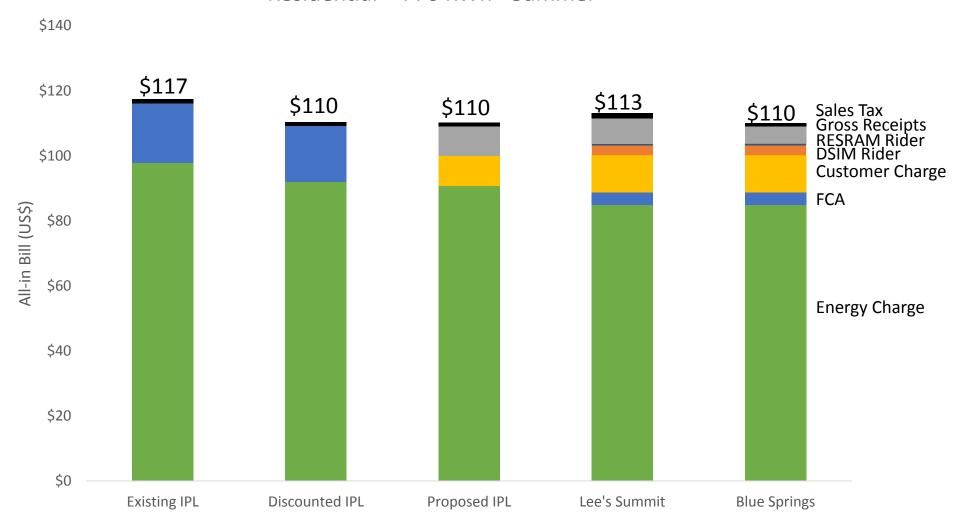




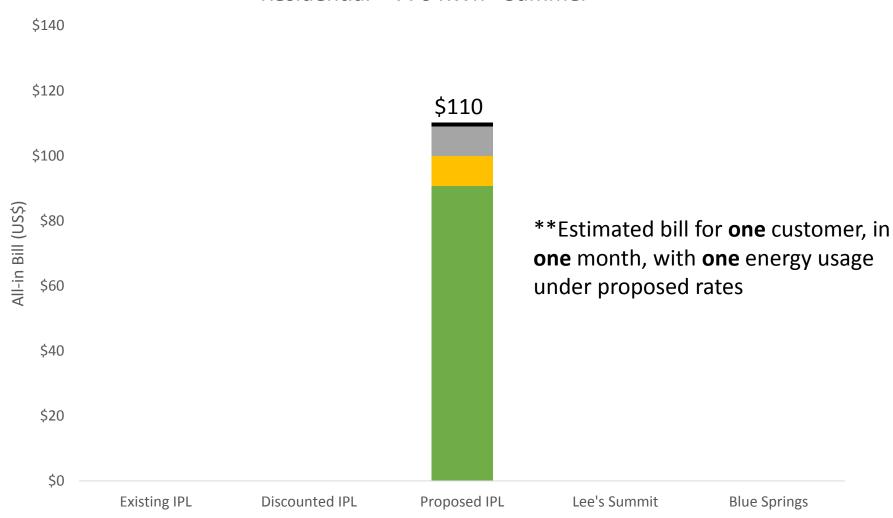
Residential - 776 KWh - Summer



Missouri







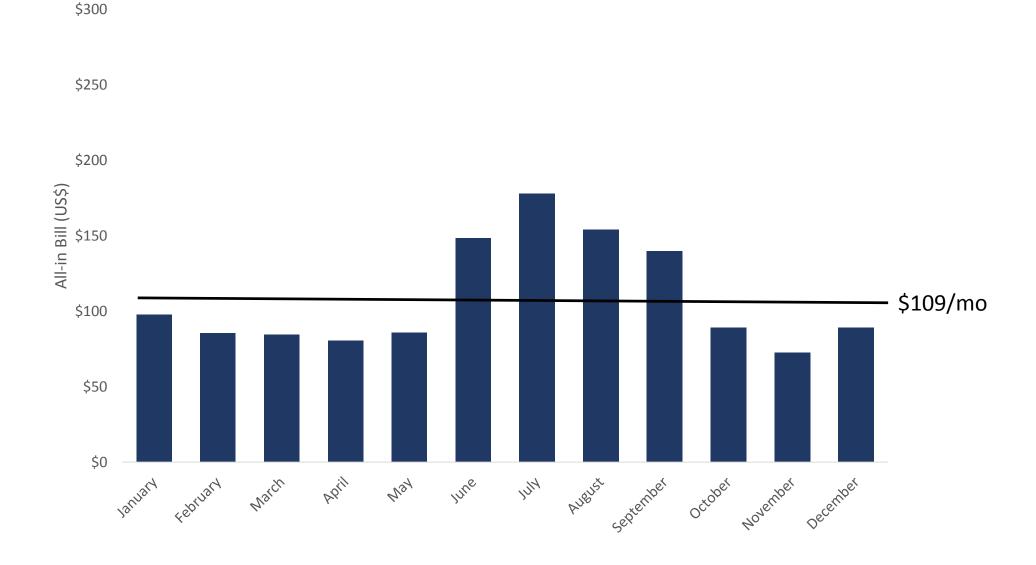
What happens if we calculate a bill for each month of the year using the average usage of all IPL residential customers in that month?

'All-in' residential bills month-to-month

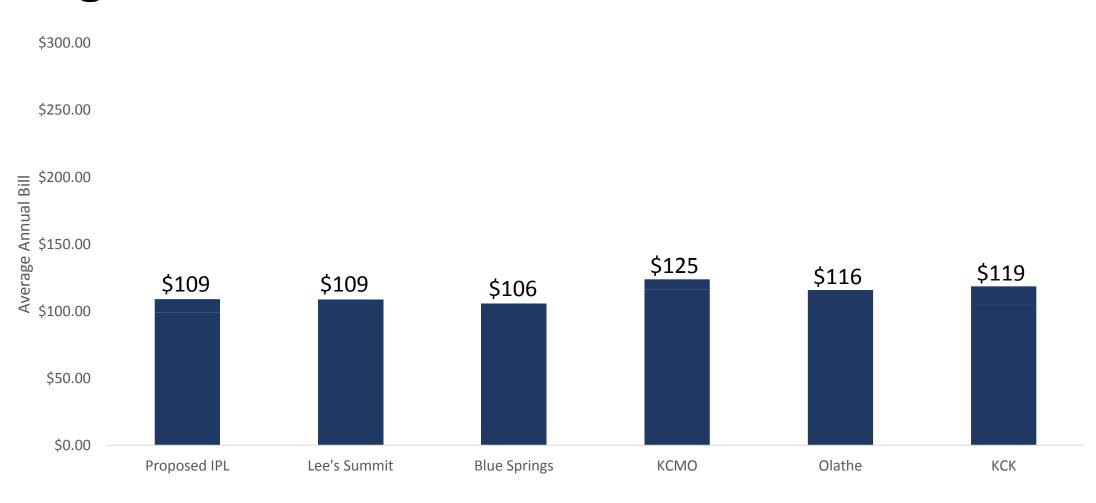


What does the 'average' residential bill look like for the year?

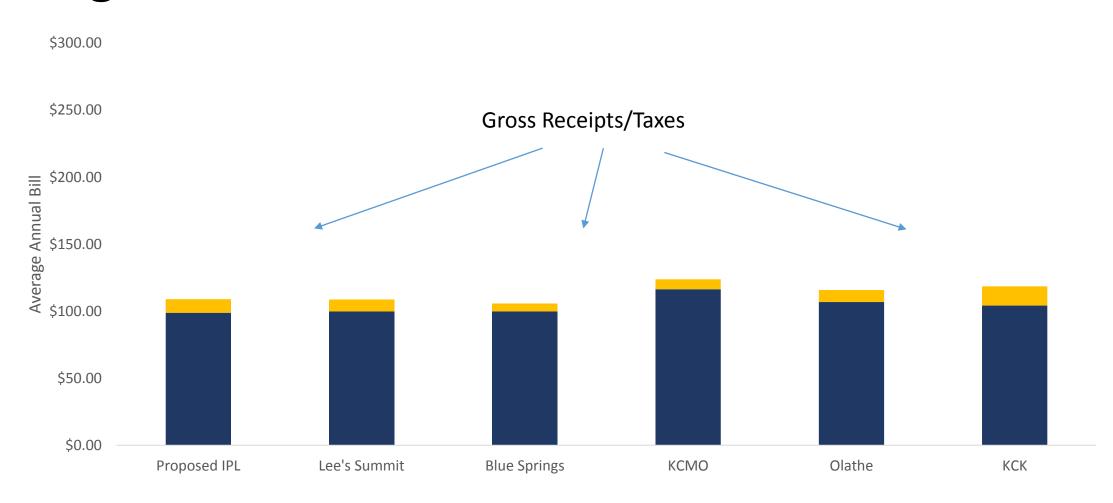
Average 'All-in' residential bill in Independence



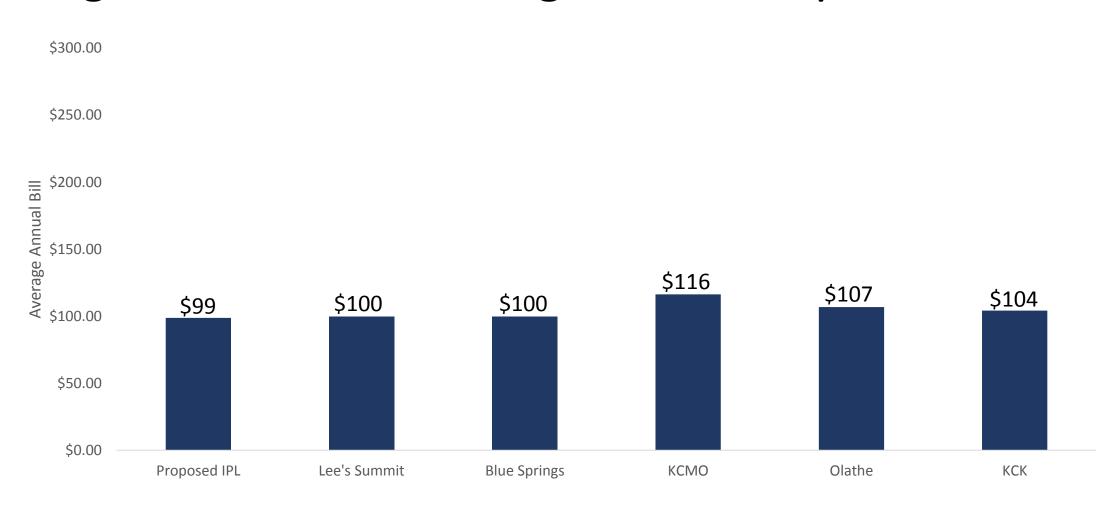
Average monthly 'All-in' residential bill in the neighborhood



Average monthly 'All-in' residential bill in the neighborhood



Average monthly residential bill in the neighborhood – excluding Gross Receipts and Taxes



Key Conclusions of Bill Comparisons

- On average, proposed IPL rates produce 'all-in' residential bills that are competitive in our neighborhood
- Bills may be higher or lower depending on the time of year and usage
- Certain cities can be lower on average because of gross receipts and taxes

 Excluding gross receipts and taxes, the average bills using proposed IPL rates are the lowest in the area, as previously presented Some would say: look at government data sets to benchmark IPL rates

Energy Information Administration

- Part of the US Department of Energy
- Based in Washington, D.C.
- Official Energy Statistics for US Government





EIA Form 861 – Annual Electric Power Industry Report

 Collects information on Operating Revenue from Sales to Customers by Utilities across the United States

Publishes "Average Retail Price of Electricity"

Most recently published data came out in 2018, using 2017 data

Next final release will be November 2019

Value of EIA statistics

Consistent methodology

Covers the entire United States

Considers utility revenue and sales

 Allows utility to see how their revenues (\$/KWh) compare to their cost of service (\$/KWh)

Price of Electricity is not a Rate

- The EIA price of electricity is not the same thing as a rate
 - 10% higher EIA price of electricity does not mean bills are 10% higher

- The EIA price of electricity is an average revenue, not a rate
 - Almost no one is actually paying 14.28 cents/KWh

EIA Price of Electricity can not be used to compare the bills and rates of Independence to those of other utilities

Why is this the case?

Average Retail Price of Electricity (Residential)

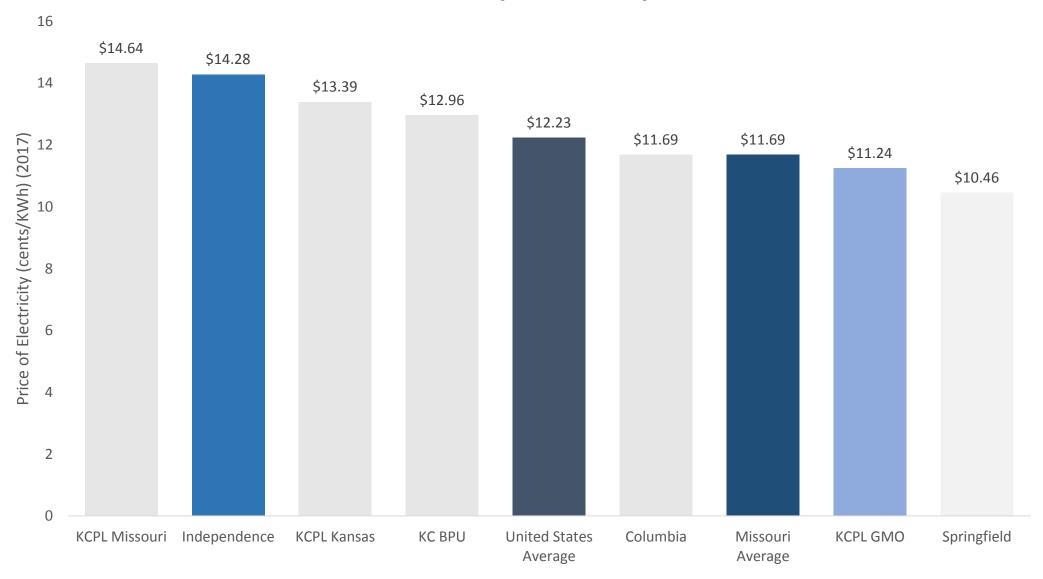
```
Revenues (US$)
Sales (KWh)

Sales (KWh)
```

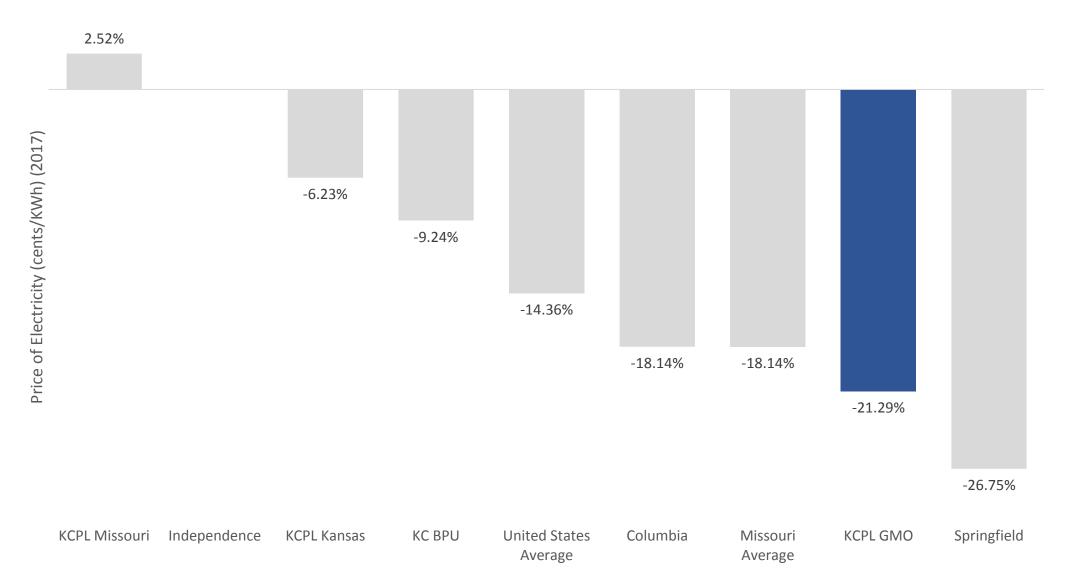
Average Retail Price of Electricity (Residential)

$$\frac{$70,707,500}{495,156,000 \text{ KWh}} = 14.28 \text{ cents/KWh}$$

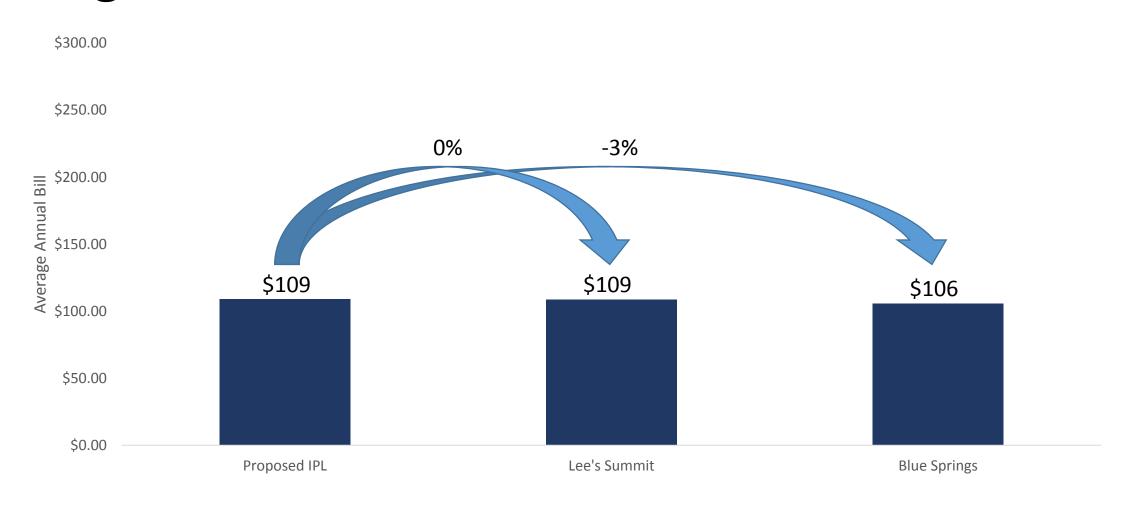
EIA Price of Electricity Comparison (cents/KWh)



Percent Difference in EIA Price of Electricity



Average monthly 'All-in' residential bill in the neighborhood



Why is our bill comparison giving us a **different conclusion** than the EIA price of electricity?

EIA Price of Electricity is not a Rate

EIA Statistics

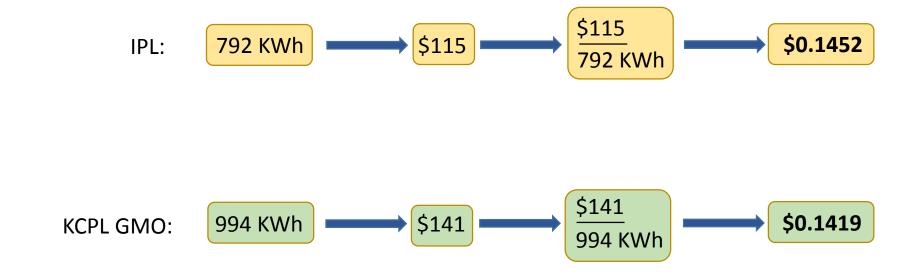
	Revenues (US\$)	Sales (KWh)	Customers
City of Independence - (MO)	70,707,500	495,156,000	52,099
KCP&L Greater Missouri Operations Co.	380,258,600	3,382,264,000	283,563

Average Usage IPL =
$$\frac{495,156,000 \text{KWh}}{52,099 \text{ people}} = \frac{9,504 \text{ KWh/year}}{12 \text{ months}} = 792 \text{ KWh/month}$$

Average Usage KCPL-GMO =
$$\frac{3,382,264,000 \text{ KWh}}{283,563 \text{ people}} = \frac{11,927 \text{ KWh/year}}{12 \text{ months}} = \frac{994 \text{ KWh/month}}{12 \text{ months}}$$

EIA Statistics

What if IPL matched KCPL GMO rates exactly?



What does this mean?

 Even if we match KCPL GMO rates EXACTLY, they will appear cheaper in EIA reports because customers in KCPL GMO on average use more electricity

....so the price of electricity cannot be the same thing as "rates"

Our Bottom line

EIA statistics have uses, but they can't tell us how IPL is impacting people's wallets

What does the EIA have to say about these conclusions?

Correspondence with EIA staff

- While the EIA asks utilities to report all revenue, including PILOT and other taxes, some utilities do not. This can cause the price of electricity to be inaccurately low, and the EIA has no way of preventing or tracking this
- The published EIA price of electricity is not the cents/KWh customers would actually pay in any given month
- The EIA retail price of electricity does not speak to the utility's 'rates.'

Electric Power Monthly

"The average price of electricity to ultimate consumers reported in this publication by sector represents a weighted average of consumer revenue and sales within sectors and across sectors for all consumers, and does not reflect the per kWh rate charged by the electric utility to the individual consumers. Electric utilities typically employ a number of rate schedules within a single sector. These alternative rate schedules reflect the varying consumption levels and patterns of consumers and their associated impact on the costs to the electric utility for providing electrical service"

Source: US EIA Electric Power Monthly, August 2019 (https://www.eia.gov/electricity/monthly/current_month/epm.pdf)

Price of Electricity Conclusions – Part 1

- EIA staff, EIA publications, actual bills from Independence, and IPL rate comparisons all arrive at the same conclusion:
 - The EIA price of electricity does not reflect the rates people pay in Independence
 - The EIA price of electricity does not reflect electricity rates in Independence
- Even though IPL seems high in EIA numbers, the reality of what people pay in comparison to other cities tells us proposed IPL residential rates are competitive

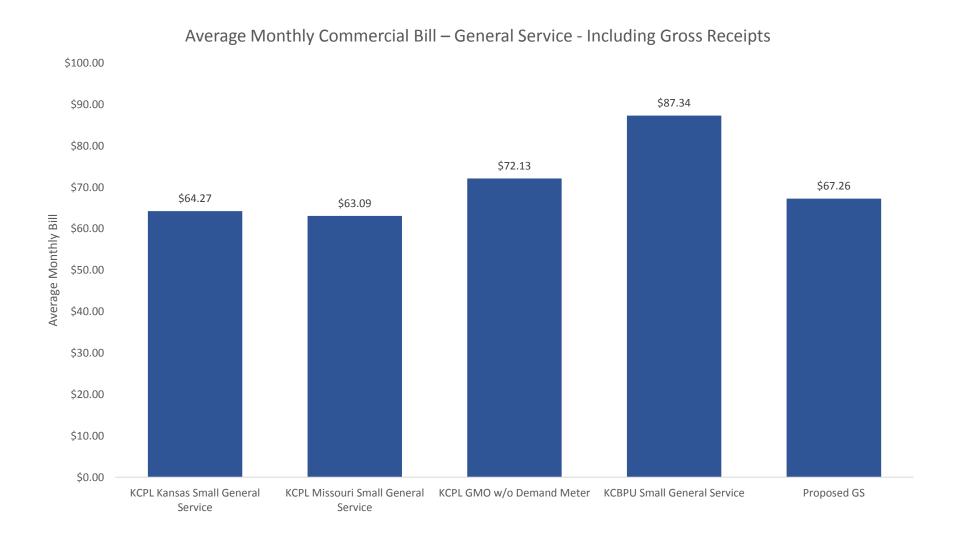
Price of Electricity Conclusions – Part 2

• Benchmarking by estimating customer bills gives you a different conclusion than benchmarking with EIA price of electricity data

 EIA price of electricity does not explicitly take into account actual rates structures, while bill comparisons do

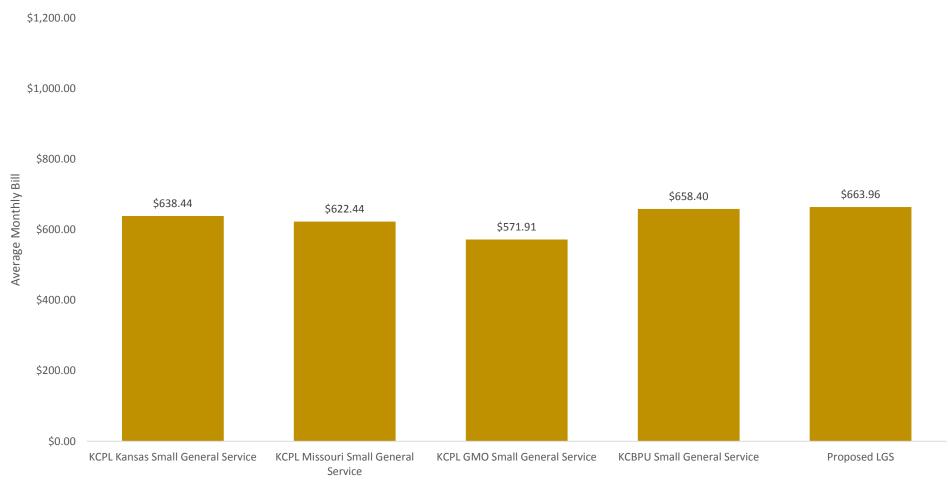
 This is why bill comparisons, not EIA statistics, are the industry standard for benchmarking rates

Initial Findings on Small Commercial Customers



Initial Findings on Large Commercial Customers

Average Monthly Commercial Bill – Large General Service - Including Gross Receipts



Questions?