Utility Bill Calculator Methodology

This calculator uses data from Mark Ellis' "Rate Of Return Equals Cost Of Capital," published in January 2025, which estimates that the average investor-owned utility has excess revenue of 13.6% due to its excessive rate of return.

To estimate how much that would be for customers in each state, we:

1 Found the **return on equity** (ROE) for the most recently approved electric utility rate case in each state.

2 Estimated the excess profit rate, based on Ellis' research that an appropriate return on equity would be approximately **6%**.

EXAMPLE

→ If the latest approved ROE was **13.6%,** the ROE excess profit rate would be **13.6 - 6 = 7.6%**

3 We calculated a weighted average ROE excess profit rate for the country based on state population, resulting in **3.88%**.

CALCULATION

→ $$\frac{\text{(ROE excess profit rate x each state's population)}}{\text{total population of all states}}$$

4 We created a **ratio** for each state of its latest approved ROE divided by the weighted average.

EXAMPLE

→ If the ROE excess profit rate for the state was **7.6%**,we divided this by **3.88%** to get a ratio of **1.96**

5 We found the average investor-owned electric utility revenue per residential customer from the Energy Information Administration for each state, and multiplied it by the average excess revenue fraction (13.6%) from the Ellis paper and by the ratio of the state's ROE excess profit rate.

EXAMPLE

→ For our sample state, this was **$2086 per customer** x **1.96 ratio** x **13.6%** = **$555 average price hike** per residential customer

We completed this calculation for each state.

Questions?
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