



How PUCs can address energy poverty

Tools include rate designs, shutoff protections

Curt Stokes

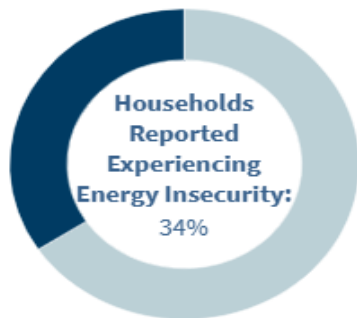
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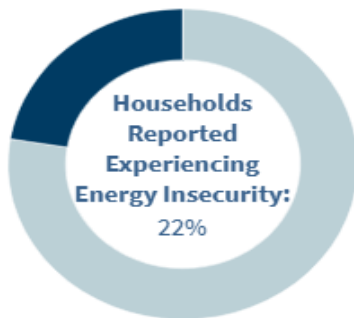
Energy insecurity is widespread

At least 70 million households experienced a form of energy insecurity in 2024

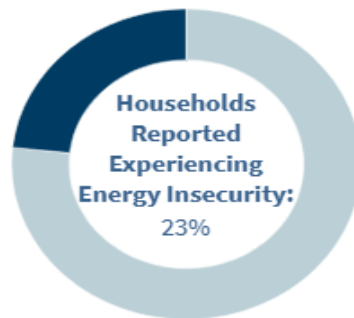
About 48.5 million households, 23% of those that reported, could not pay an energy bill or pay their full amount.



Metric 1: 71.4M households reduced or forwent expenses for basic household necessities



Metric 2: 46.7M households kept home at a temperature that felt unsafe or unhealthy



Metric 3: 48.5M households were unable to pay an energy bill or unable to pay the full bill amount

Source: US Census Bureau's Household Pulse Survey



Source: RMI, *We Can End Energy Poverty in the Electric Sector: Here's How*, available at <https://rmi.org/we-can-end-energy-poverty-in-the-electric-sector-heres-how/>

PUCs can use targeted rates as a tool to change the system and reduce energy insecurity at scale

Examples of targeted solutions

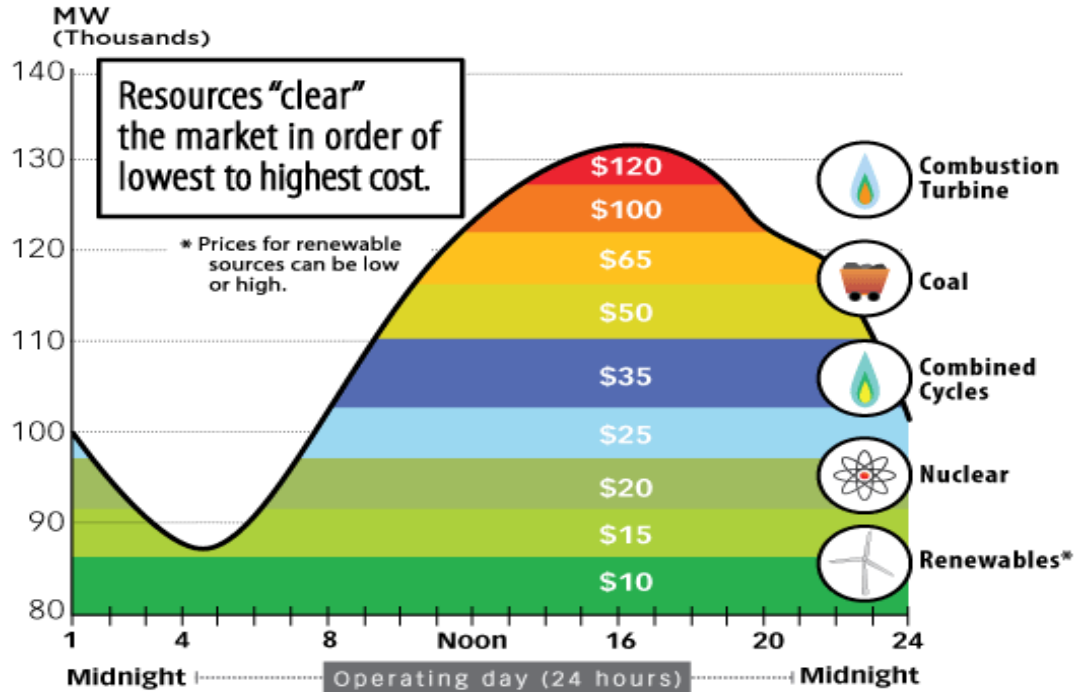
- Optional Time-of-Use Rates
- Performance Metrics Tied to Reduced Customer Disconnections



Time-Of-Use Rates

Rate option to give customers greater control

Generation resource mix costs vary depending on the time of day. Customers can save money by using energy when it is cleaner



Benefits of Time-Shifting: Electricity can be cleaner and cheaper depending when energy is used

Table 8-1: 2022 PJM Marginal Emission Rates (lbs-CO2/MWh)

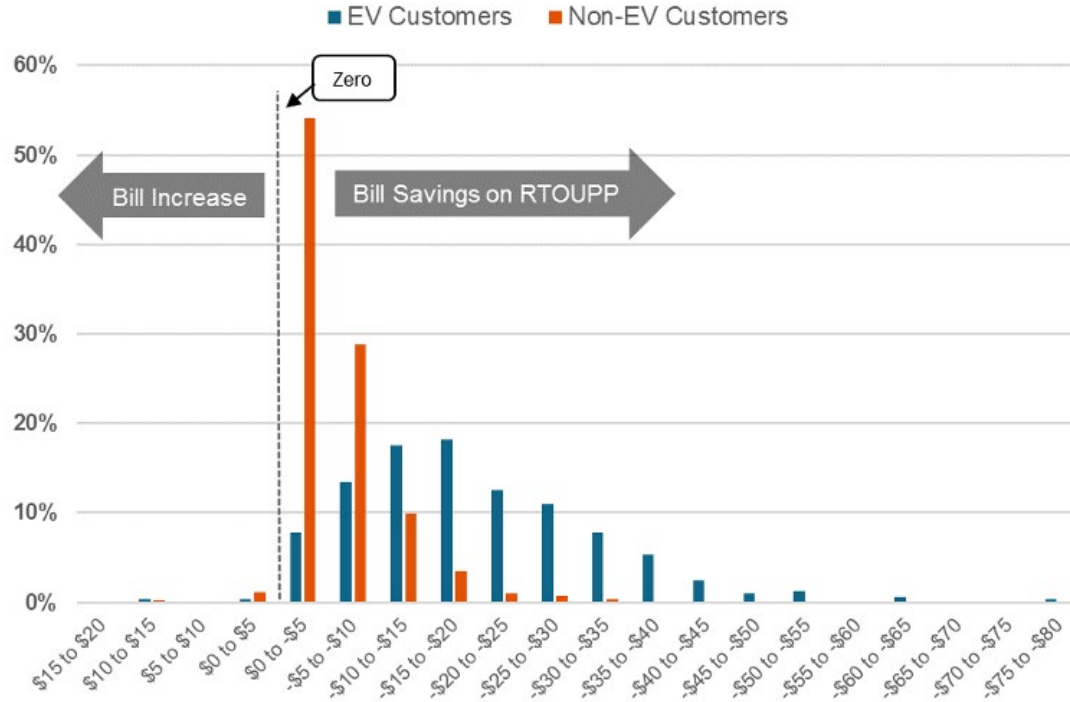
Period	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Peak	1,124	973	1,017	893	938	1,071	1,232	1,192	1,044	946	944	1,012
Off-Peak	1,196	1,078	954	839	830	888	1,041	1,033	958	924	947	1,017

¹³ <https://www.pjm.com/library/reports-notice.aspx>

With time of use rates, Illinois utility ComEd found about 99% of customers could save money while the system reduced emissions

ComEd Pilot

Figure 5-8: Distribution of Average Monthly Bill Savings or Increases by EV and Non-EV Customers



ComEd Rate “BEST” (Basic Electric Service Time-of-Use Pricing) and Delivery Time-of-Day Pricing (DTOD)

Morning	6 a.m. – 1 p.m.	\$\$
Mid-Day Peak	1 p.m. – 7 p.m.	\$\$\$
Evening	7 p.m. – 9 p.m.	\$\$
Overnight	9p.m. – 6 a.m.	\$

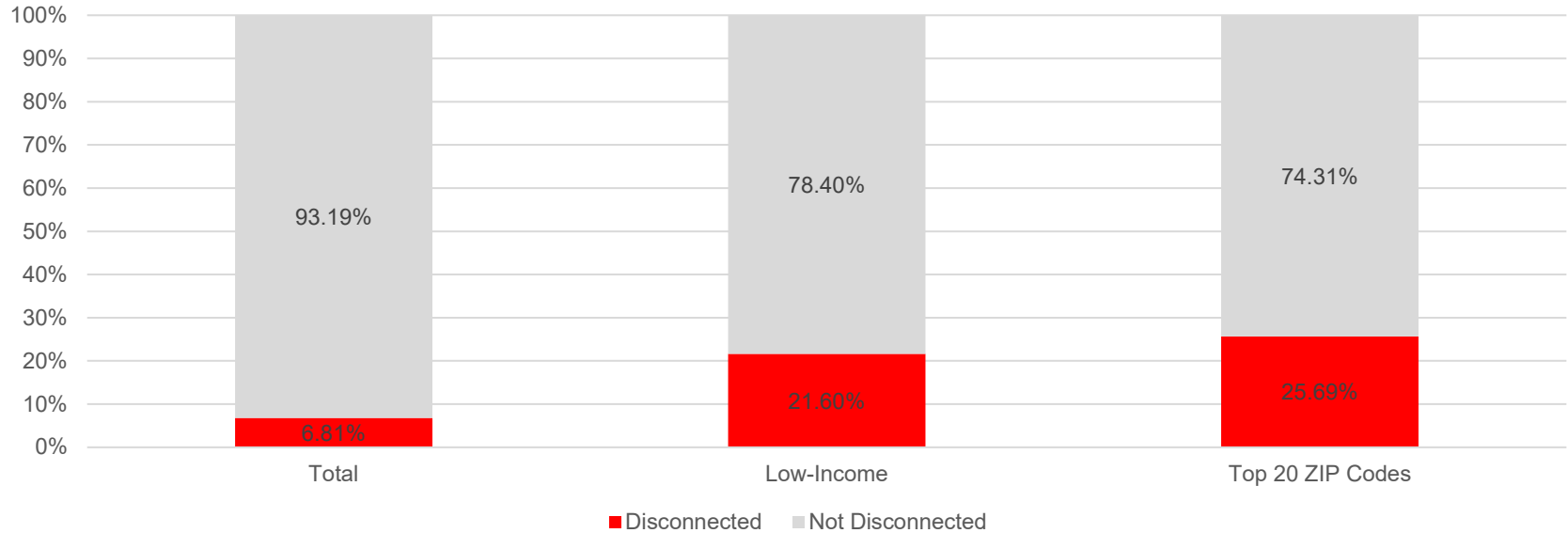


Performance-based Ratemaking

Reducing customer disconnections

Commonwealth Edison (2023)

Residential Disconnections

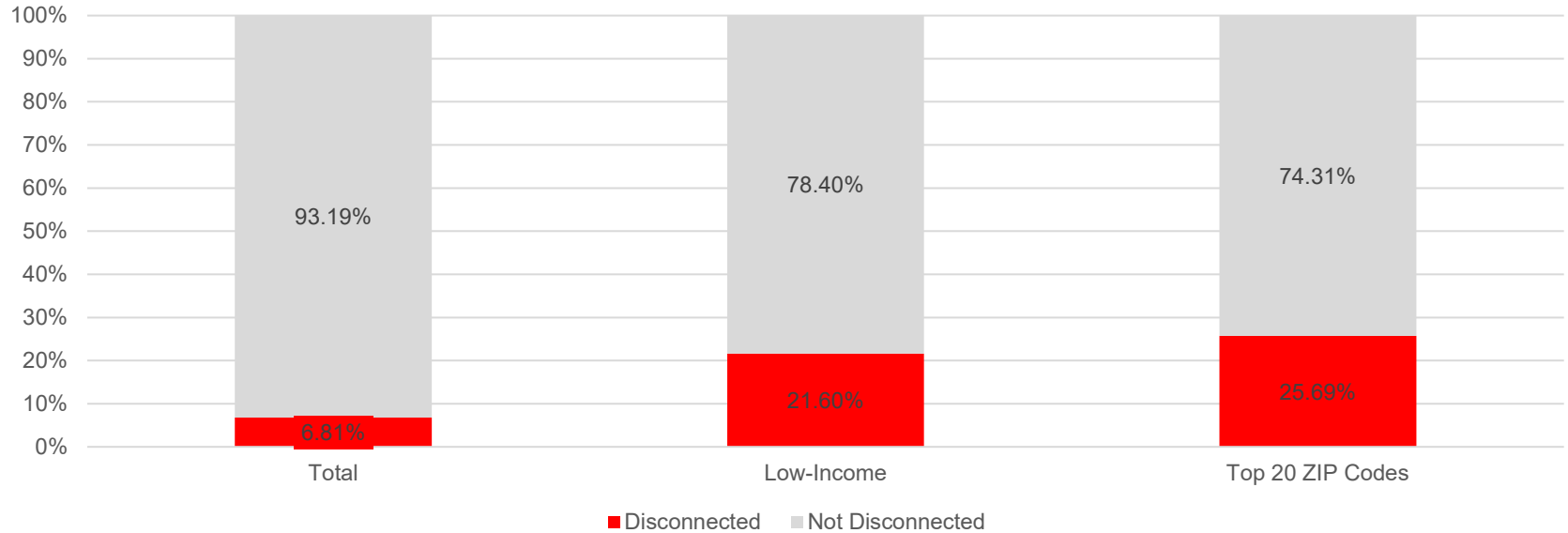


Commonwealth Edison - Performance Targets

- Reduce Disconnection Ratios by 2031:
 - In top 20 ZIP codes:
 - 18.35% in 2023 reduced to
 - 12.00% by 2031 (3,981 avoided disconnections per year)
 - For all residential customers:
 - 5.26% in 2023 reduced to
 - 4.00% by 2031 (47,088 avoided disconnections per year)

Ameren Illinois (2024)

Residential disconnections



Ameren Illinois - Performance Targets

- Reduce Disconnection Ratios by 2031:
 - In top 20 ZIP codes:
 - 25.69% in 2024 reduced to
 - 15.00% by 2031 (2,681 avoided disconnections per year)
 - For all residential customers:
 - 6.81% in 2024 reduced to
 - 4.81% by 2031 (21,266 avoided disconnections per year)