Rate Design and Public Policy: Tools to Reverse Energy/Utility System Inequities

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Median 2015 Electricity Usage (kWh) by HH Income by Census Region
Average 2009 Household Electricity Usage (kWh) by 150% Poverty Status

Source: U.S. Energy Information Administration, 2009 Residential Energy Consumption Survey
National Consumer Law Center, June 2014
Electricity Consumption Graphs and Tables

- Website detailing electricity consumption by
  - Income category
  - Race of householder
  - Age of householder
- U.S. Energy Information Administration – Residential Energy Consumption Survey
- 27 “Reportable Domains”
- Click on state or region on US map
Median 2015 Home Energy Burdens by Income Category and Census Region
Frequency of Reducing or Forgoing Basic Necessities Due to Home Energy Bill by Household Income Category - U.S.

Almost every month  
Some months  
1 or 2 months
Frequency of Reducing or Forgoing Basic Necessities Due to Home Energy Bill by Race - U.S.
Increased Fixed Customer Charges

- Since 2014 electric utilities in at least 34 states have proposed to shift recovery of revenue requirements from volumetric charges to monthly fixed, customer charges.

- Intra-class cost shift
  - Shifts costs within a rate class from high-volume consumers to low-volume consumers within a rate class
  - Data demonstrates that in all regions of the US electricity usage is below the residential class average for:
    - Low-income households
    - Elder households
    - Households of color
  - Diminished efficiency incentive and customer control over the bill
Gradualism
Digital Grid: Low-Income Concerns

- Advanced metering
  - System costs
  - Remote disconnection of service
    - Prepaid service and low-income consumers
  - Penalties from time-varying rates
Advanced metering – A ‘Just Transition’ for Low-Income

- System costs
  - Effective Low-income affordability programs
    - Bill payment assistance
    - Energy efficiency
  - Remote disconnection of service
    - Consumer protection enhancement to outpace new tech deployment
    - Prepaid service and low-income consumers
Advanced metering – A ‘Just Transition’ for Low-Income

- Penalties from time-varying rates
  - Hold harmless
  - Opt-in
  - Shadow billing
During this transitional period, proposals related to capital investment, rates and rate design, the utility business model, or the regulatory framework should be evaluated to assess home energy security impacts. Negative impacts – even in the short term – should be mitigated with implementation of effective programs and policies.

E.g., MA net metering/SRECS hold harmless