Duke Energy’s Shift Towards Solar Power In North Carolina

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Electric Utility Companies
Natural Monopoly

[Diagram showing costs and revenue with points labeled P, Z, X, and Q. The diagram includes long run average cost, long run marginal cost, and points A, B, and AR.]
North Carolina’s Energy Market

Comparison of NC Residential Electricity Usage and Monthly Bills to US Average
Source: U.S. Energy Information Administration

- Monthly Usage (kWh): North Carolina = 1,077, U.S. Average = 903
Conclusions Drawn from Duke’s Natural Monopoly

- Duke = Largest Electric Utility Company in U.S.
- Through Economies of Scale
  - Explains:
    - Because Duke has high efficiency
      - Consumers Receive lower rate than national average
      - $11.10 vs. $12.10 per kilowatt (2014)
        - Info from U.S. Energy Information Association
State Legislation doesn’t allow 3rd party (non-utility) companies to sell residential customers solar panels

Arguments Against:
- Causes customers to pay higher prices
  - B/C they have to pay utility companies
- Also doesn’t allow competition in the market

Arguments for:
- Solar panels don’t produce enough energy
  - Therefore customers have to pay for non-solar produced energy from utility company
- 3rd Party sale would cause higher utility price to compensate for lost revenue that helps pay high cost of infrastructure
Duke Energy’s Sale of Solar Panels

Figure 2: Visual Representation of Net Metering
Consumers are wrong for not wanting Duke Energy’s Monopoly to extend to Solar Energy
Because Consumer Surplus that is presented