Profits and Progress Through Distributed Resources

Presented by
David Moskovitz

The Regulatory Assistance Project
Website:
http://www.raponline.org
Introduction

Purpose: To see whether regulation may unintentionally cause utilities to be hostile to distributed resources and if so what regulatory fixes are available
Profitability Background

➢ To Whom
  - Utility = Regulated entity
  - Including profits of unregulated activities doesn't help
  - Fixing regulatory problems can help
  - There are limits
Conclusions: Factors That Matter

- Where the DR is located
  - Customer side or utility side
  - High cost area or not

- Utility
  - Price and cost structure
  - Structure and ownership are not important

- Regulation
  - Type of PBR
  - FAC or anything like it
  - Stranded cost recovery
Utility Ownership: Three Issues

➢ Profit implications
  ➢ Ownership does not matter much

➢ Competitive implications
  ➢ Absent deaveraged pricing, or the equivalent, ONLY the utility is in a position to profit
  ➢ Unbeatable competitive advantage

➢ Practical considerations

➢ Hardly any state said no to large generation so who will say no to small?
Regulation and utility profits do not work as you might expect!

Once case ends prices are all that matter

Profits = revenue - costs

Rev = price * volume

Costs mostly unrelated to volume

Thus: if DR causes volume to decrease, utility profits drop
Lost Profits Math: Vertically Integrated Utility

- Utility with $284 million rate base
- ROE at 11% -- $15.6 million
- Power costs $.04/kwh, retail rates average $.08; Sales at 1.776 TWh
  - At the margin, each saved kWh cuts $.04 from profits
  - If sales drop 5%: profits drop $3.5 M
    - DR equal to 5% of sales will cut profits by 23%
Lost Profits Math:
Wires Only Utility

- Utility now has $114 Million in Rate Base
- ROE of $6.2 Million
- Distribution rate of $.04
  - If DR located in low cost area each kWh cuts profits $.04
  - If sales drop 5%: profits drop $3.5 M
    - Reduction in sales of 5% lowers profits by 57%!
Policy Options

- PBR - Revenue versus price caps
- Rate design
- Price signals
  - De-Averaged Distribution Credits
  - Distribution Development Zones
    - Symmetrical pricing flexibility - G&G
    - Targeted incentives
    - Stranded cost balancing accounts
# One Utility Strategy: Change Rate Design

## OPTION 1
- $25/month
- Utility profits not at risk
- Customer DR incentives drop
- Price caps and rev caps merge
- Financially behaves like a revenue per customer PBR
- Very large consumer impacts

## OPTION 2
- 5 cents/kWh
- Utility profits at risk
- Large customer incentives for DR
- Most need for revenue based PBR
Price or Revenue Caps

- Both have same cost cutting incentives
- Revenue caps better match costs
- Revenue caps deal with DR lost sales disincentives without radical price reforms