Understanding the Utility Business Model

Southern California Edison, Pacific Gas and Electric, San Diego Gas and Electric

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Summary

- Understanding the utility investment process and business model is key in developing a regulatory and financial framework for Distributed Energy Resources (DERs).
- The misconception that utilities are biased towards making capital expenditures without considering other factors is a barrier to understanding utilities' spending decisions.
- The regulatory compact and ratemaking process allow utilities to achieve the goal of providing safe and reliable service to customers in the most cost-effective manner.
- The ability to evaluate and manage risk is important for the utility to recover cost, prevent stranded assets, and attract investors.

Investment Decision Process

- Assess system capacity and energy needs.
- Develop cost-effective solutions to address those needs.
- Weigh solutions with factors such as safety, reliability, cost, policy objectives, etc.
- Make decision based on least-cost-best-fit principle.

Regulated Firms vs. Competitive Firms

Business Aspect	California IOUs	Competitive Firms
Price	Set by the Commission	Set by firm/market
Obligation to Serve	Under regulatory compact to serve all customers in service territory	Can choose their customer base, subject to anti-discrimination laws
Authorized Return on Investment	Set by the Commission	Not applicable
Earned Return on Investment	Depends on business performance	Depends on business performance

How Do Utilities Make Money?

- Common misconception: utilities have the motivation to build as large a rate base as possible.
- Utilities' authorized rate of return is set in the cost of capital proceeding.
  - Authorized revenues include a return component equal to the rate of return multiplied by the rate base.
- Earned rate of return is dependent on managing costs effectively.
  - If actual costs are above authorized costs, the IOU will not earn the rate of return that investors require.
  - If actual costs are below authorized costs, the cost savings will be incorporated in the forecast cost of service in the next GRC and passed on to customers at that time.
- Our financial imperative to be cost-effective does not create a conflict with doing what's best for our customers.

How Do Shareholders Make the Decision to Invest?

- Investors and utility managers want a sustainable business that creates value.
- Poor or sub-optimal investments can contribute to uncompetitive rates or become stranded assets.
- How to develop sustainable rate base growth:
  - Maintain and provide safe and reliable utility service, including energy delivery.
  - Promote relevant policies such as carbon reduction goals.
  - Provide greater customer choice for generation sources, rate alternatives, and participation in other energy related activities such as energy efficiency, demand response, etc.

Evaluating and Managing Risk in the Investment Decision Process

- Utilities' expenses are subject to close scrutiny.
- Cost recovery is not guaranteed.
- Assets can become stranded.
- It is imperative that utilities be cost-effective and align interests with customers.

DER Compensation Should Correspond with the Level of Risk

- Embedded in the authorized rate of return is the compensation for the risk that the utility faces.
- Investment incentive structures should be aligned with the level of risk each choice would create.
- Fair compensation for DERs should consider:
  - Direct and indirect costs.
  - The value they provide to the grid.
  - The risks they may create.
  - The challenges and complexities these investments face.

APPENDIX

Cost Recovery Timeline

- Some costs are recovered in the same period they are incurred.
- However, some costs are reimbursed over a longer period of time.
- As a result, IOUs need to find investors that provide money upfront to pay for these investments.
- These investors expect a return of (depreciation) their investment and a reasonable return on their investment.