

1.4.29 Future Electric Utility Regulation



Project Description

- ▶ Provide technical assistance and analysis for public utility commissions and a series of reports with multiple perspectives on evolving utility regulation and ratemaking, utility business models and electricity markets:
 - Adapting to new technologies and services
 - Assessing potential financial impacts on utilities and customers
 - Engaging consumers
 - Addressing utility incentives to achieve grid modernization goals

Expected Outcomes

- States will have improved capability to consider alternative regulatory and ratemaking approaches to enable grid modernization investments.
- Approaches will better tie utility earnings to consumer value, economic efficiency, and other policy goals.
- Ultimately, states will provide utilities with regulatory guidance and incentives to efficiently deploy capital to achieve grid modernization goals.

Significant Milestones	Date
Upgrade financial modeling tools and assess financial impacts of new technologies and services on utilities and customers	10/1/16, 10/1/17
Complete 6 reports for Future Electric Utility Regulation series by electric industry thought-leaders	4/1 and 5/15/17, 4/1 and 10/1/18
Publish technical report on performance-based regulation (PBR) with case studies and results of productivity and incentive power research	5/15/17
Provide technical assistance on financial impacts for 3-4 states per year	10/1/17, 10/1/18
Provide technical assistance on PBR, distribution services markets, energy services pricing to 2-4 states per year	10/1/17, 10/1/18



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Progress to Date

- ▶ Technical assistance to states:
 - Alternative cost recovery mechanisms for demand response (MN)
 - Cost recovery approaches for grid resiliency and security investments (PA)
 - Revenue decoupling (MT)
 - Impacts of tariff changes on financial performance of solar PV systems (Puerto Rico)
 - Performance-based regulation (VT)
 - Utility investor valuation framework and incentives (CA)
- ▶ Financial modeling tools and analysis
 - Upgraded FINancial impacts of Distributed Energy Resources model and assessed combined financial effects of aggressive 10-year ramp-up of energy efficiency and distributed solar on utility costs and returns and customer rates and bills
 - Upgraded Integrated Energy System Model and evaluated impact of several time-of-use rate designs on energy consumption patterns and associated distribution grid impacts
- ▶ New reports in the Future Electric Utility Regulation series
 - *The Future of Centrally-Organized Wholesale Electricity Markets* (published March 2017)
 - *Regulatory Incentives for Utilities — and Disincentives — to Invest in Grid Modernization* (under review)
 - *Value-Added Electricity Services: New Roles for Utilities and Third Parties* (underway)
 - See feur.lbl.gov