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.

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