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***Reviewing the Business Case and Cost Recovery for  
Grid Modernization***

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PREPARED BY:  
Sanem Sergici, Ph.D.  
Michelle Li  
Rebecca Carroll

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## Executive Summary

### Study Highlights

- There is now significant experience from grid modernization investments that can be used to develop best practices.
- We reviewed 21 grid modernization initiatives, of which 10 have achieved regulatory approvals based on quantified benefits and costs. This review showed:
  - While most grid modernization efforts were initiated in response to local or state policy requirements, some were based on utility initiatives.
  - In most cases regulatory approvals were based on standardized benefit-cost tests, such as the Total Resource Cost (TRC) test; some notable examples received approvals based on less standard approaches such as break-even analysis; proof of cost prudence and foundational nature of investments for other utility initiatives to move forward.
  - Obtaining regulatory approvals took 13 months on average. Significant delays were associated with presentations of incomplete benefit-cost analysis and strong stakeholder oppositions.
  - The majority of cost recovery utilizes general rate case filings, but a number of cost recovery mechanisms rely on formula rates and rate riders to address regulatory lag. Some jurisdictions also introduced performance-based rates and performance incentive mechanisms in combination with the cost recovery of grid modernization investments.