



Infrastructure Cost Recovery Mechanisms: A National Overview

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Purpose and Scope of Testimony

☐ Purpose

- Informational- What is happening policy wise around the nation
- Explanatory- How mechanisms work within regulatory paradigm

☐ Scope

- Review of factors driving regulatory change
- Review the range of policy alternatives currently employed to address these factors



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Need for Enhanced Recovery Mechanisms

☐ Changing Environment

- Safety Issue
- Productivity Improvements
- Storm Recovery
- Reduced consumption/demand

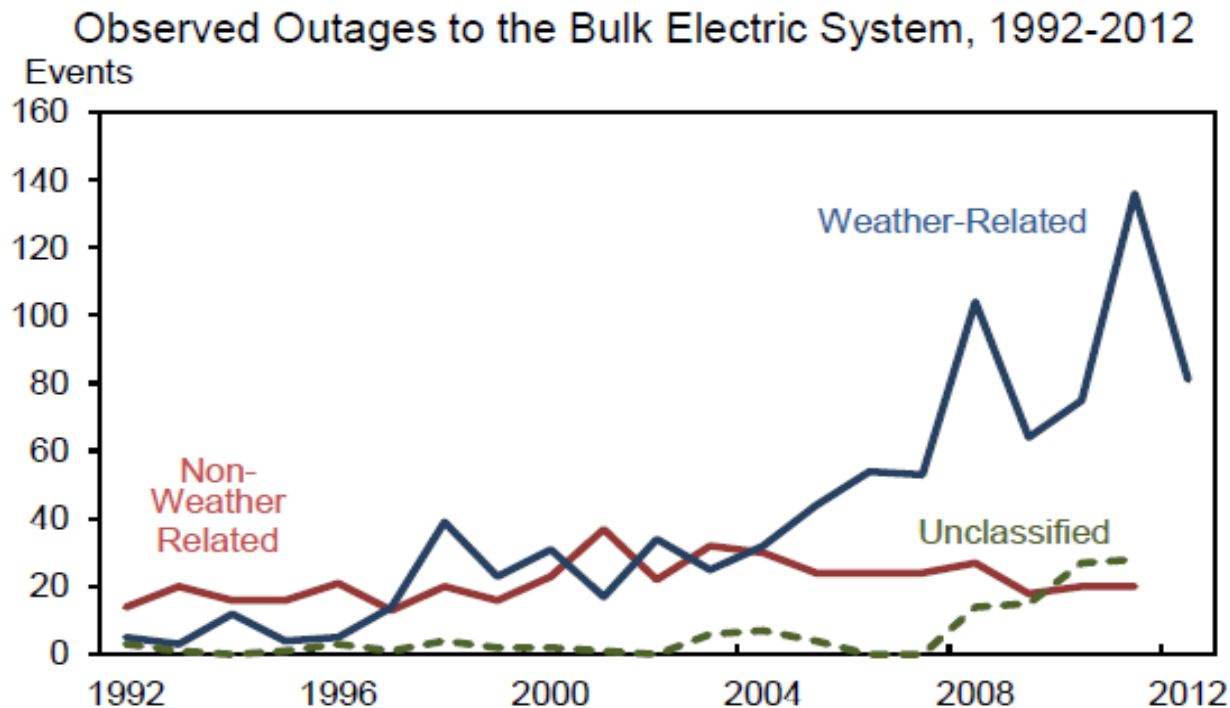
☐ Objectives of Regulation

- Energy Efficiency Investment
- Conservation
- Intelligent Systems- Grid Modernization, Smart technology
- Outcome focus-performance



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Effects of Weather on System Outages



Source: Energy Information Administration

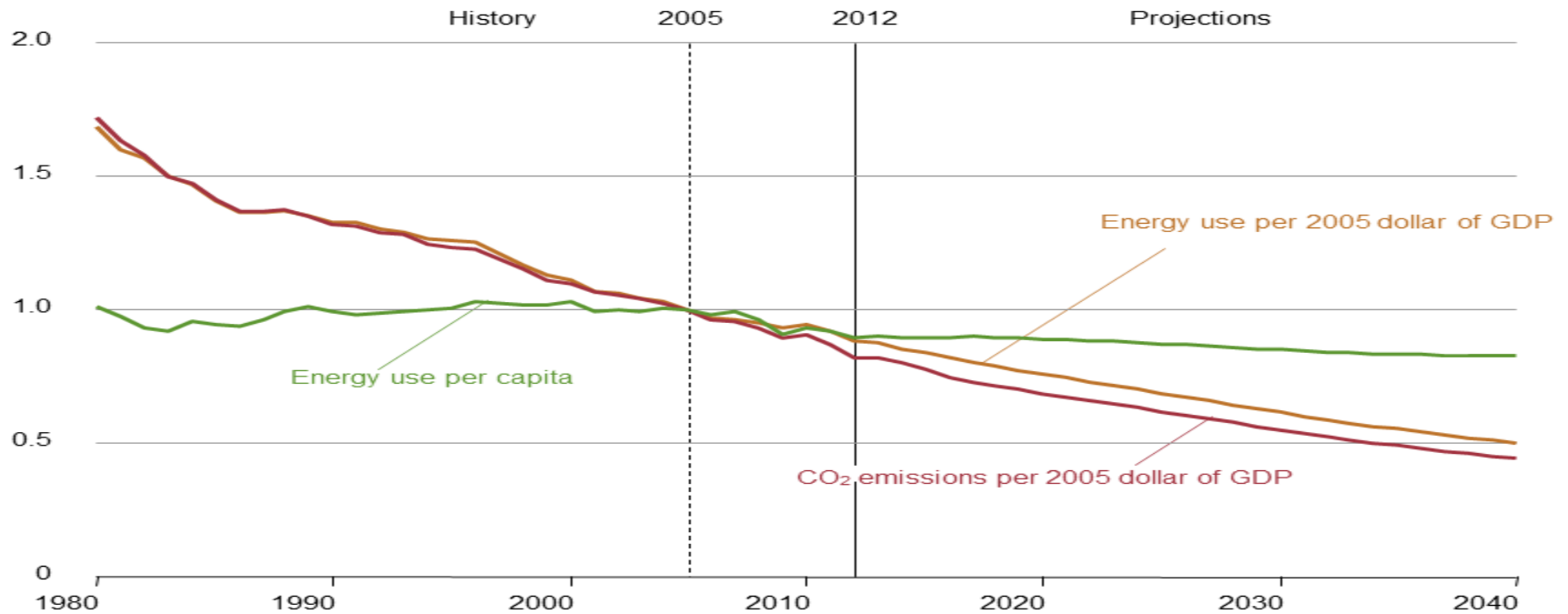


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Energy Use

Figure 9. Energy uses per capita, energy use per dollar of GDP, and emissions per dollar of GDP, 1980-2040

(index, 2005=1)





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Electric Demand Growth

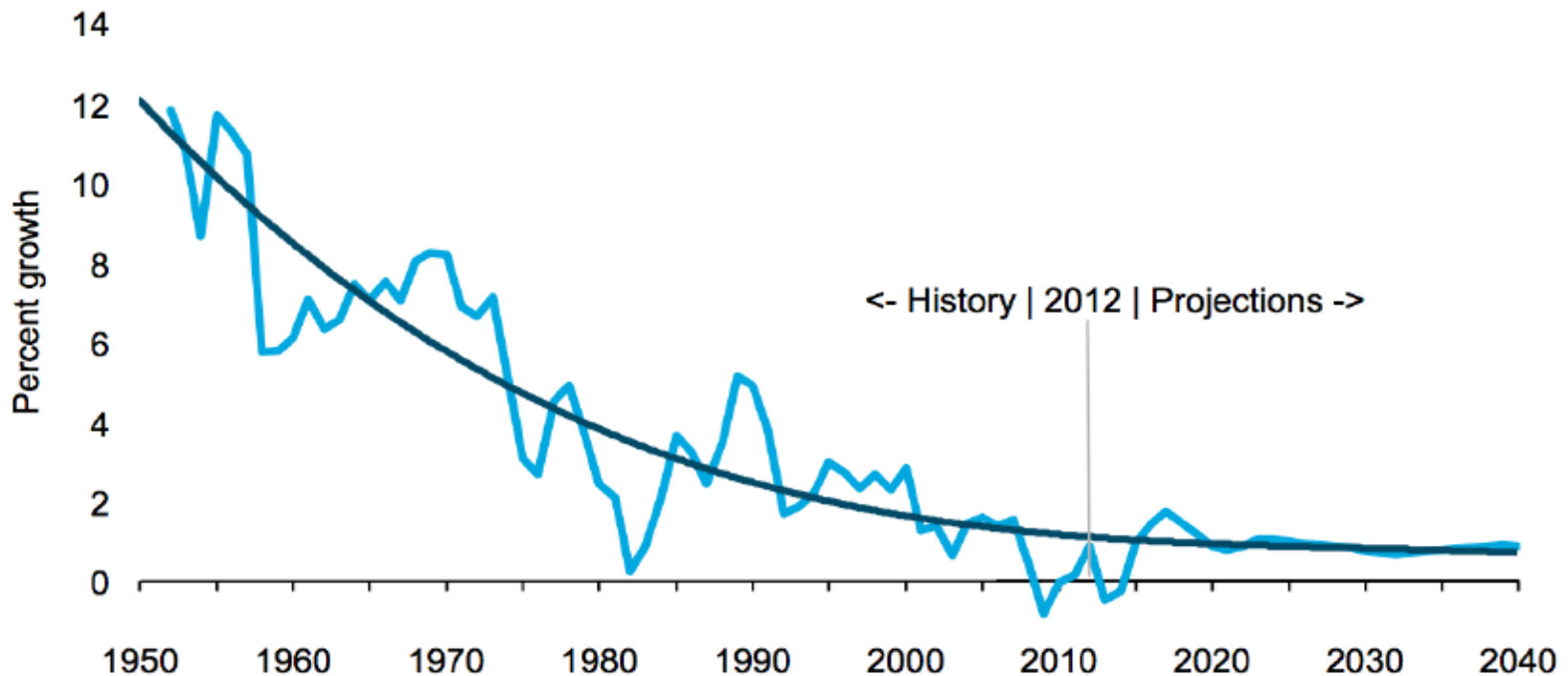


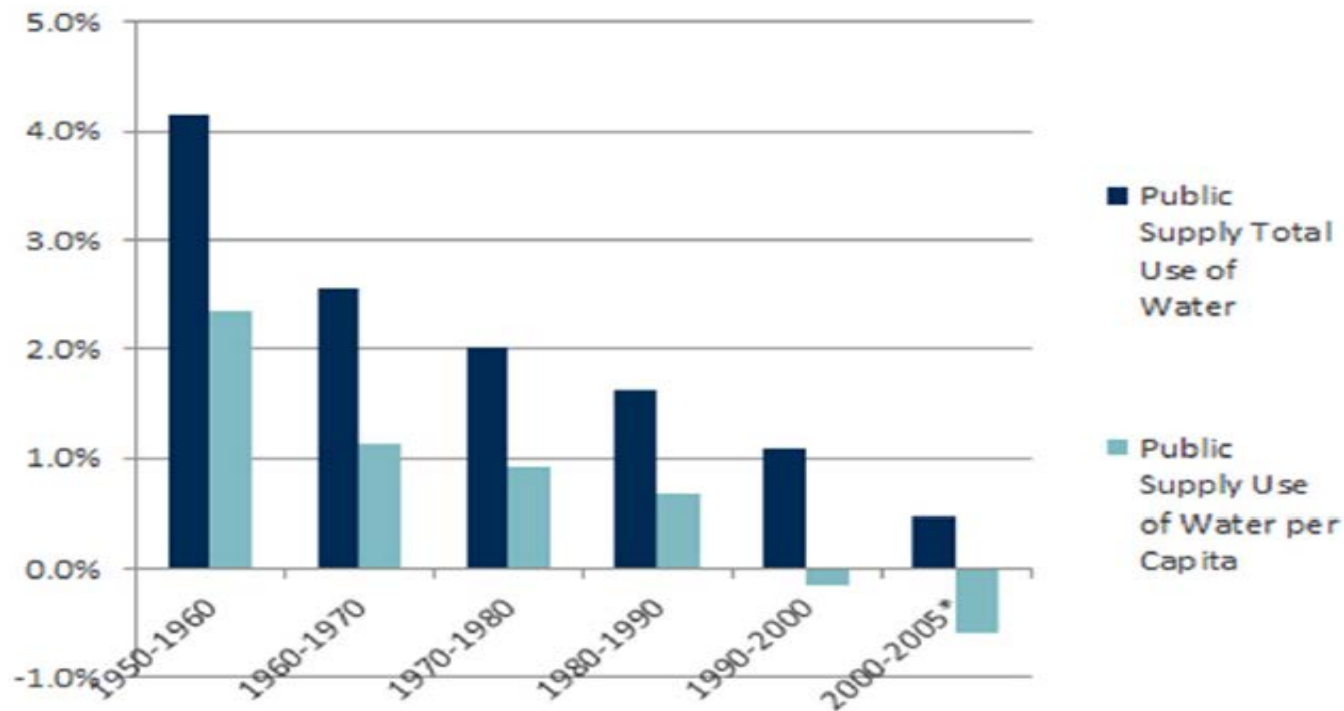
Figure 1. U.S. electricity demand growth, 1950-2035 (percent, 3-year moving average). Figures beyond 2012 are projections and not actual data. *Source:* EIA 2013e.



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Water Demand Growth

Figure 3.3: Trends in Annual Growth Rates of Public Supply Water in Total Use and Use Per Capita in U.S., 1950 – 2005²⁹





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Revenue Requirement

$$RR = OC + T + d + r (V-D) [+/-\text{surcharge, rider, tracker}]$$

RR = Allowed Revenue Requirement

OC = Operating Costs

T = Taxes

d = Annual depreciation

r = Rate of return

V = Value of plant and equipment

D = Accumulated/accrued Depreciation.

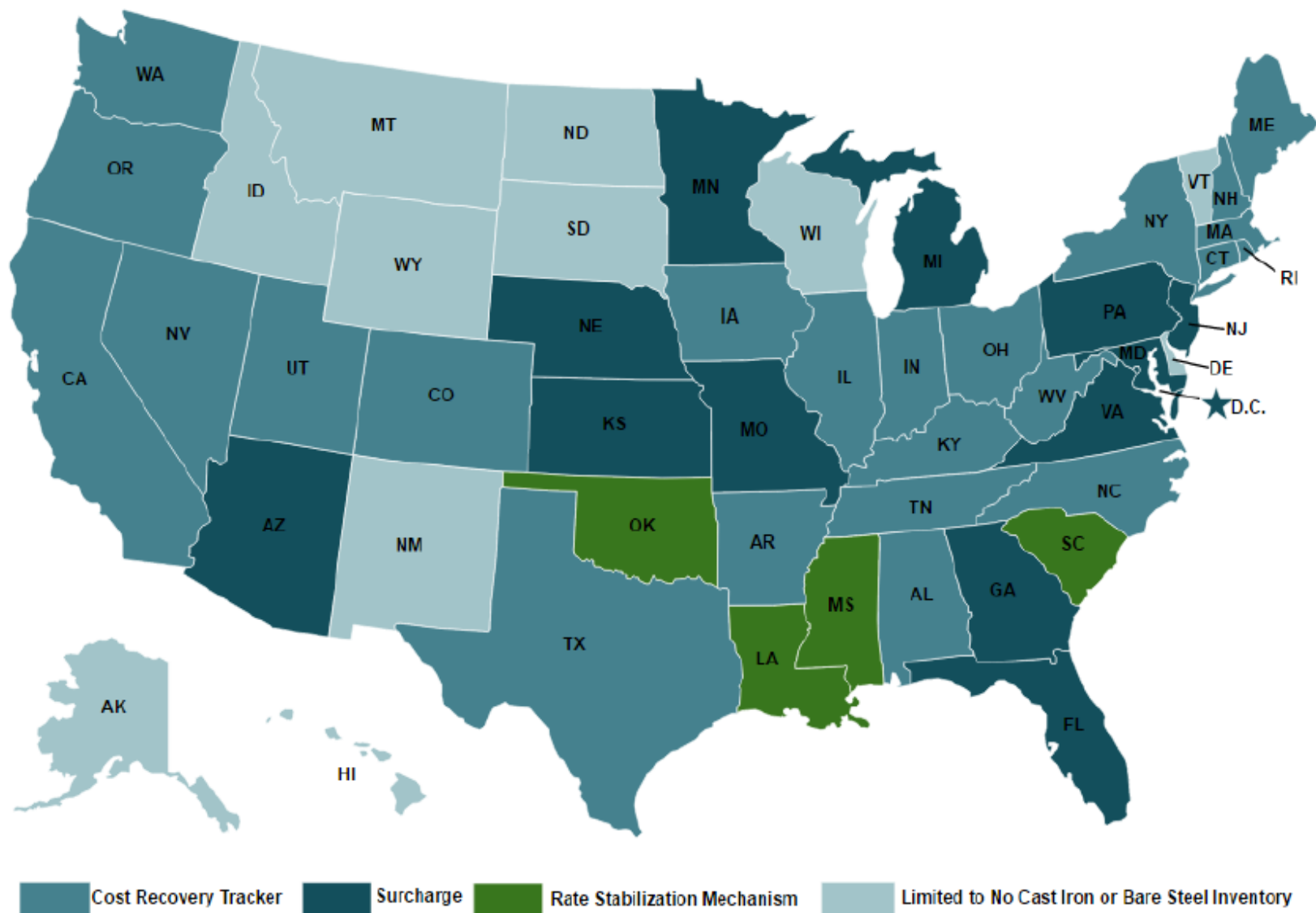
Variety of Mechanisms

- ☐ Surcharges
- ☐ Trackers
- ☐ Construction Work in Progress (CWIP)
- ☐ Test Years
- ☐ Rate Design
- ☐ Formula Rates
- ☐ Multi-Year Rates
- ☐ Performance/Earnings Sharing Mechanisms

Current Mechanism in Missouri

- ☐ Surcharges
- ☐ Trackers-Main replacement
- ☐ Rate Design
- ☐ Test Year- partial forecasted may be employed
- ☐ Performance Regulation- Earning Sharing

Attachment 6: States with Accelerated Infrastructure Replacement Programs



**As of February 2016*

Conclusions

- ☐ Enabling legislation should provide authority to state commission to adopt/employ alternative forms of regulation on a case-by-case basis.
- ☐ Legislation should empower the commission by ensuring it has ample regulatory tools to address problems as they unfold.
- ☐ If the Legislature identifies a problem as critical to the public interest it can pass legislation that targets a particular mechanism to address the particular problem.

Appendix- Additional State Policy Maps

Data Sources

- ❑ Alternative Regulation and Ratemaking for Water Companies, Joseph Wharton, Bente Villdasen and Heidi Bishop, The Brattle Group, September 23, 2013
- ❑ Gas Distribution Infrastructure: Pipeline Replacement and Upgrade, Prepared for The American Gas Foundation by Yardley Associates, July 2012.
- ❑ Alternative Regulation For Evolving Utility Challenges, Prepared for The Edison Electric Institute, Pacific Economics Group Research LLC., January 2013.
- ❑ Testimony of Cheryl Campbell on behalf of AGA, House Transportation and Infrastructure Committee United States Congress, February 25, 2016

Figure 3: Recent Capex Tracker Precedents by State: Water Utilities

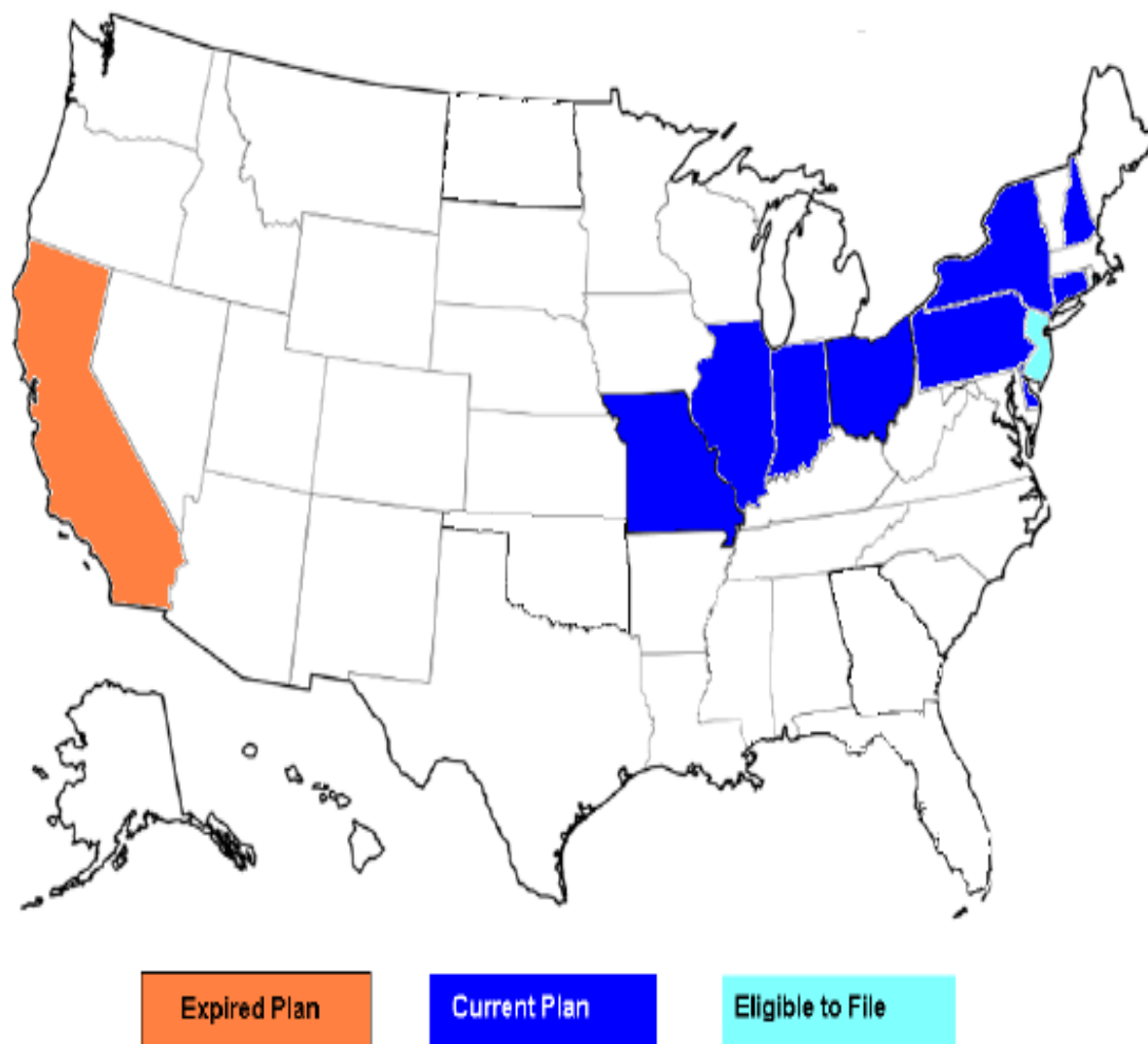


Figure 4: Recent Electric Precedents for CWIP In Rate Base

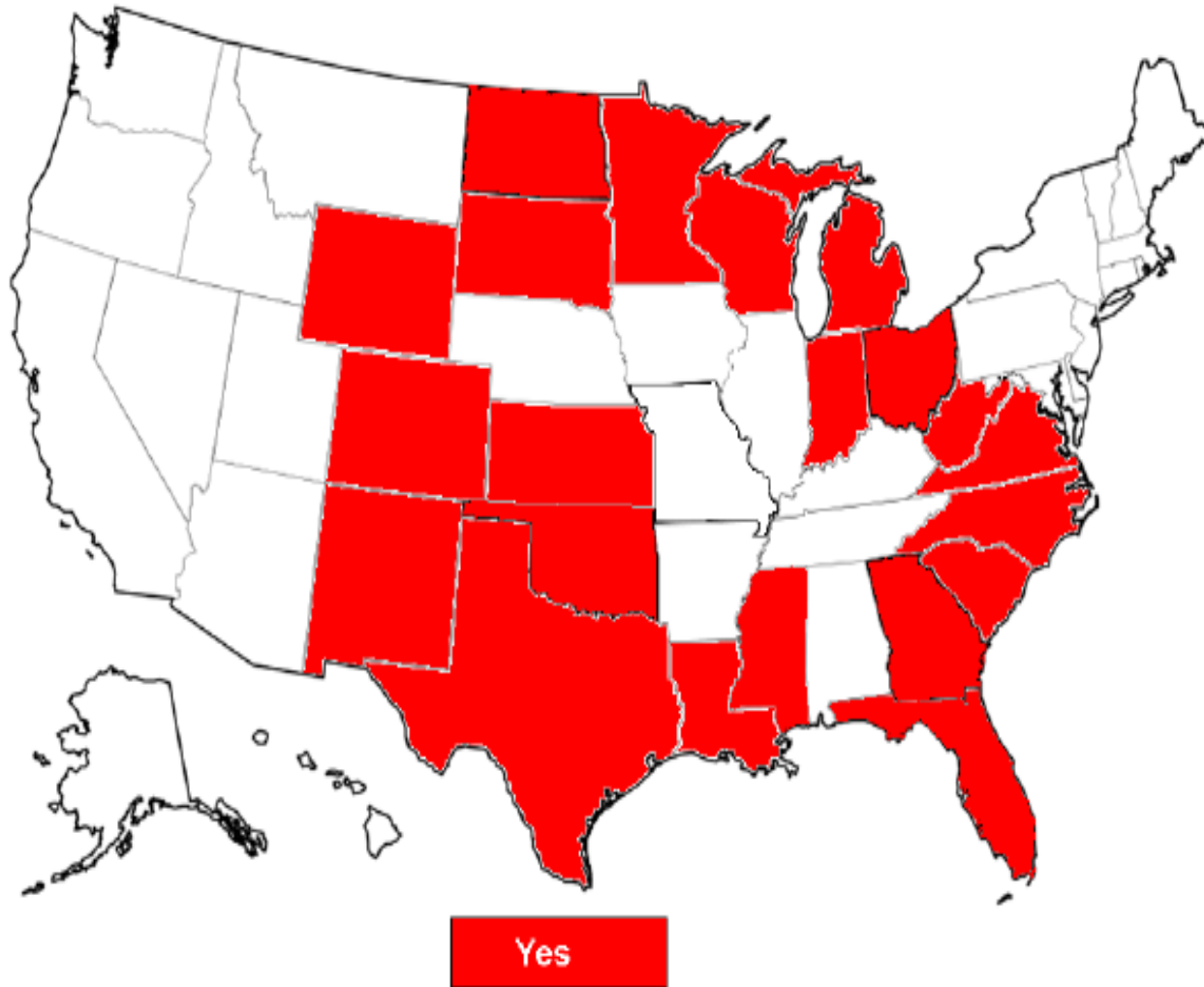


Figure 8: Test Year Policy by State

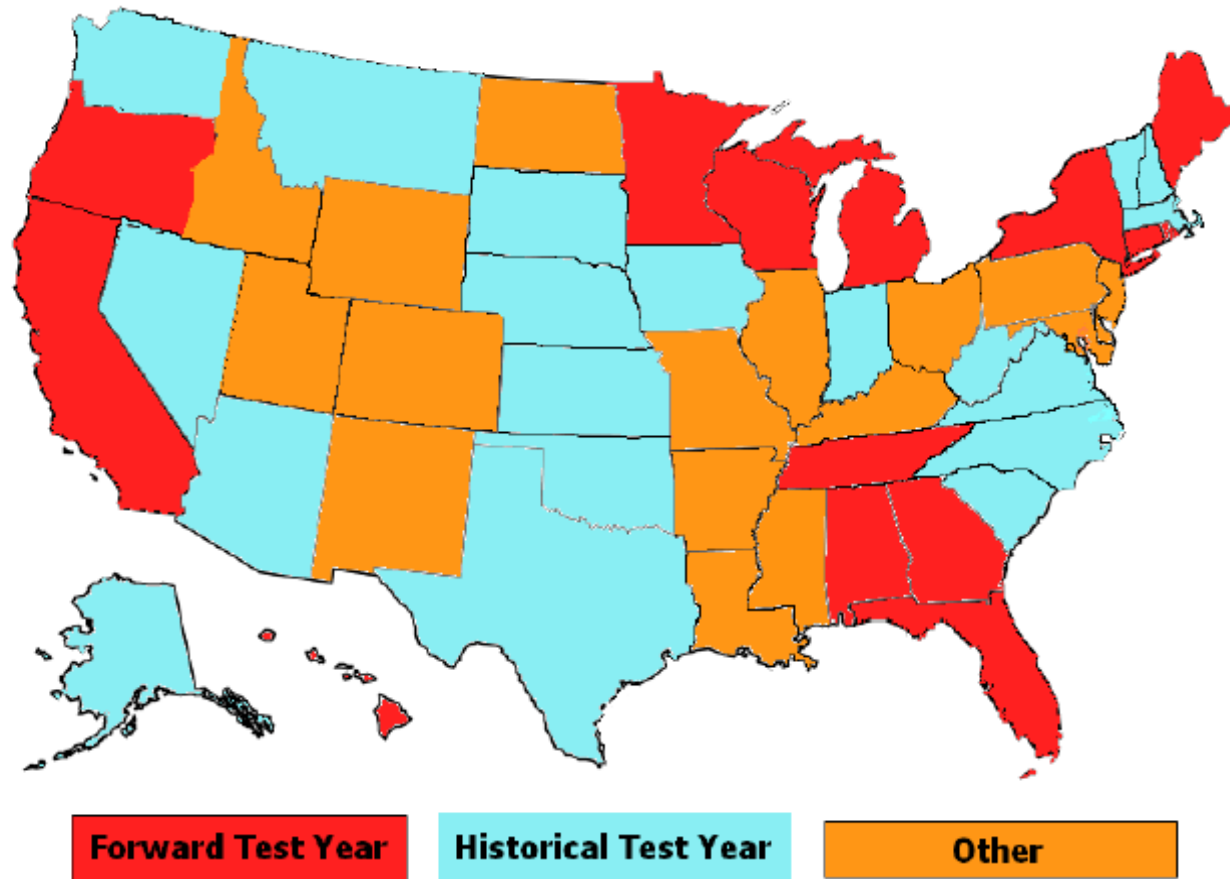


Figure 7: Fixed Variable Pricing Precedents by State

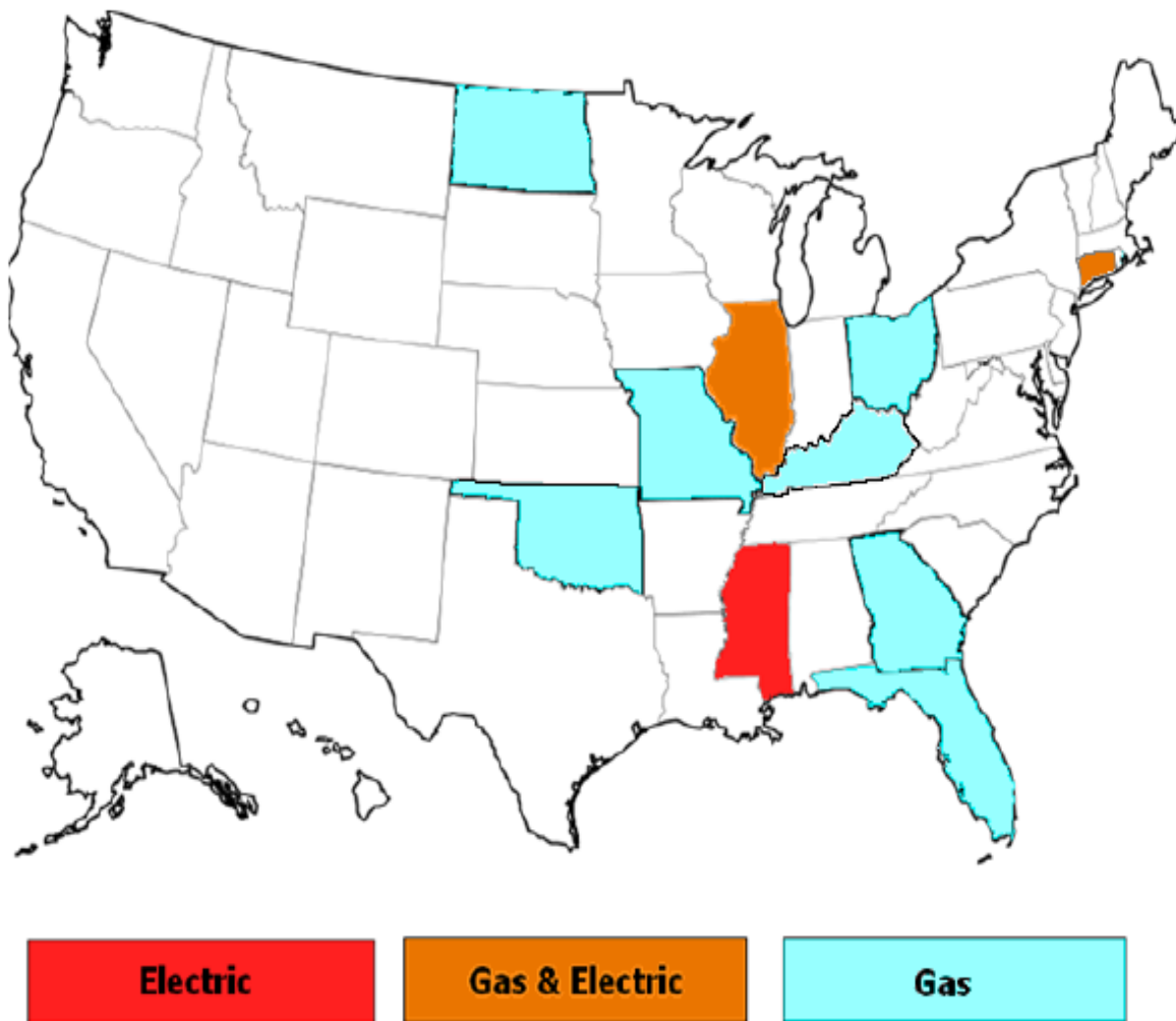
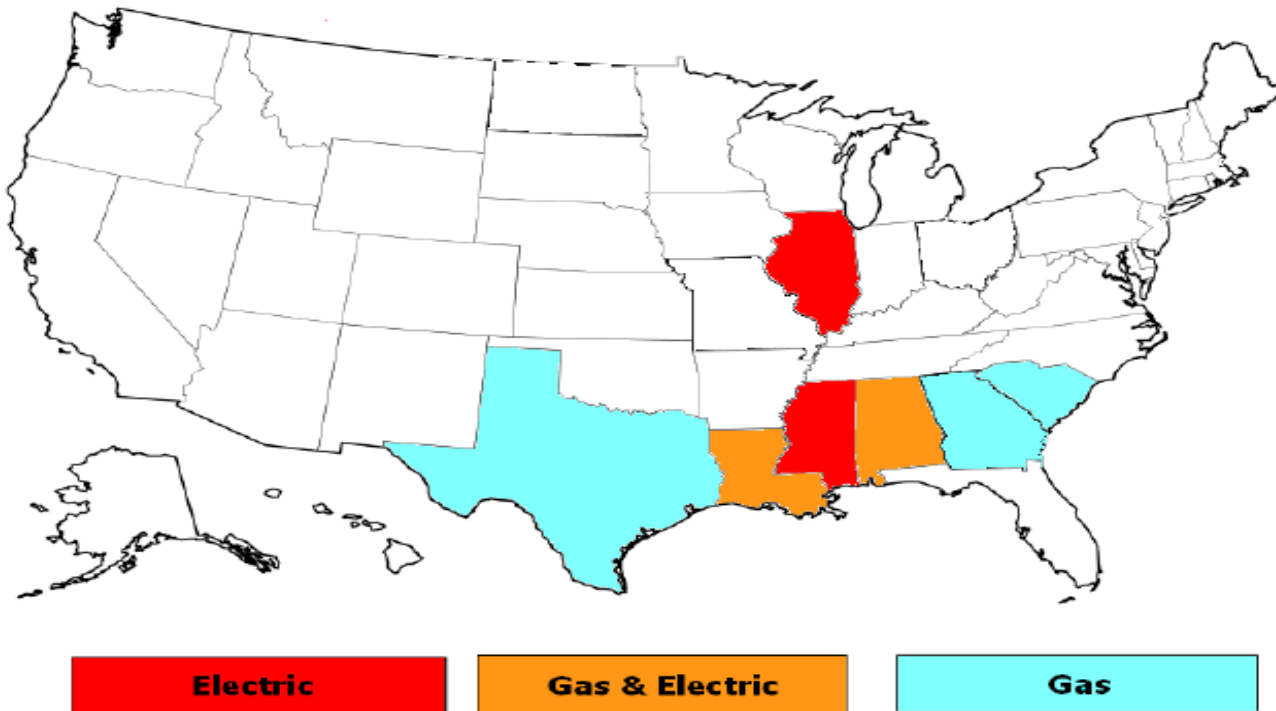


Figure 10: Current Retail Formula Rate Precedents by State



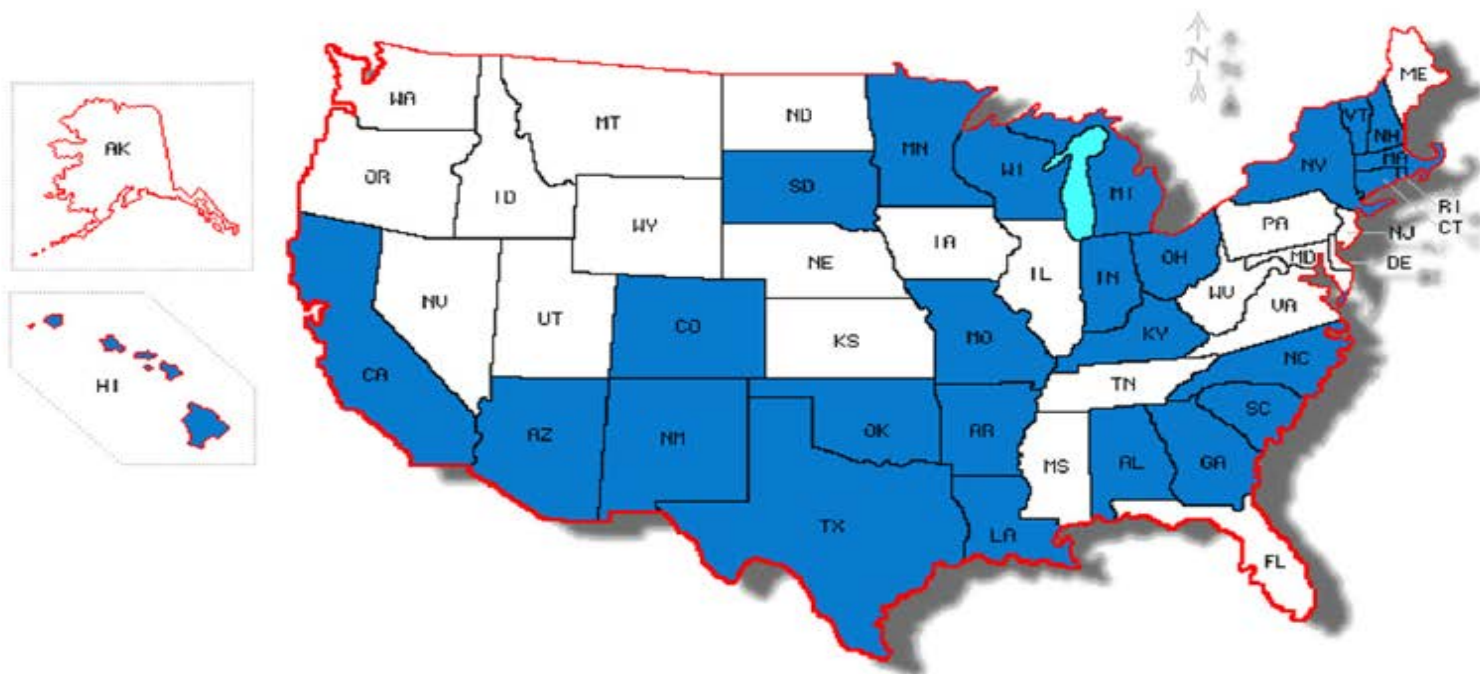
Multi-Year Rates Electric companies

Figure 4.11: States that Allow Multi-Year Rate Mechanisms for Electric Companies⁵²



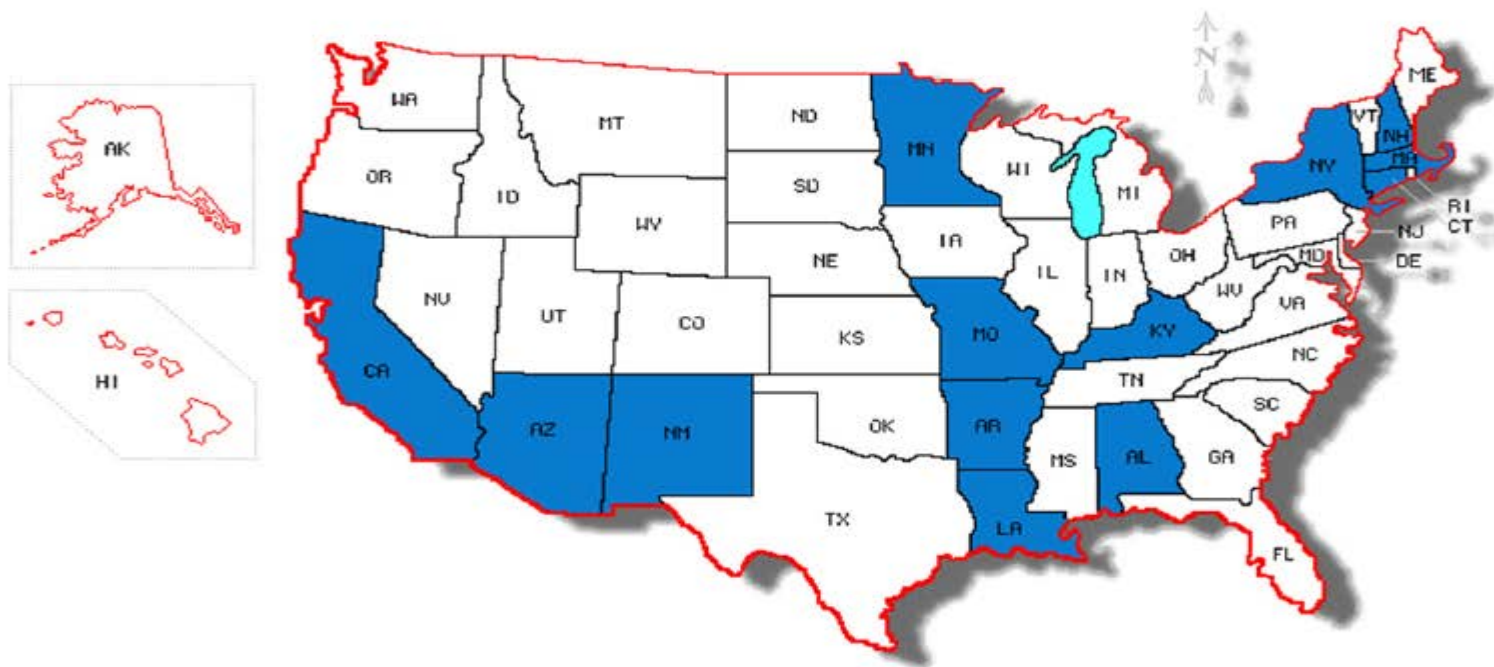
Performance/Earnings Sharing Mechanisms

Figure 4.14: States Allowing Performance Based Measures or Earning Sharing for Electric Companies⁶¹



Performance/Earnings Sharing-Gas

Figure 4.15: States Allowing Performance Based Measures or Earning Sharing for Gas Companies⁶²



Formula Rates for Water Companies

Figure 4.10⁵⁰: States Allowing Formula Rate Making for Water Companies





Figure 4.18⁶⁶: States with Future Test Years for Water Companies



Figure 5b: Gas Decoupling True up Plans by State

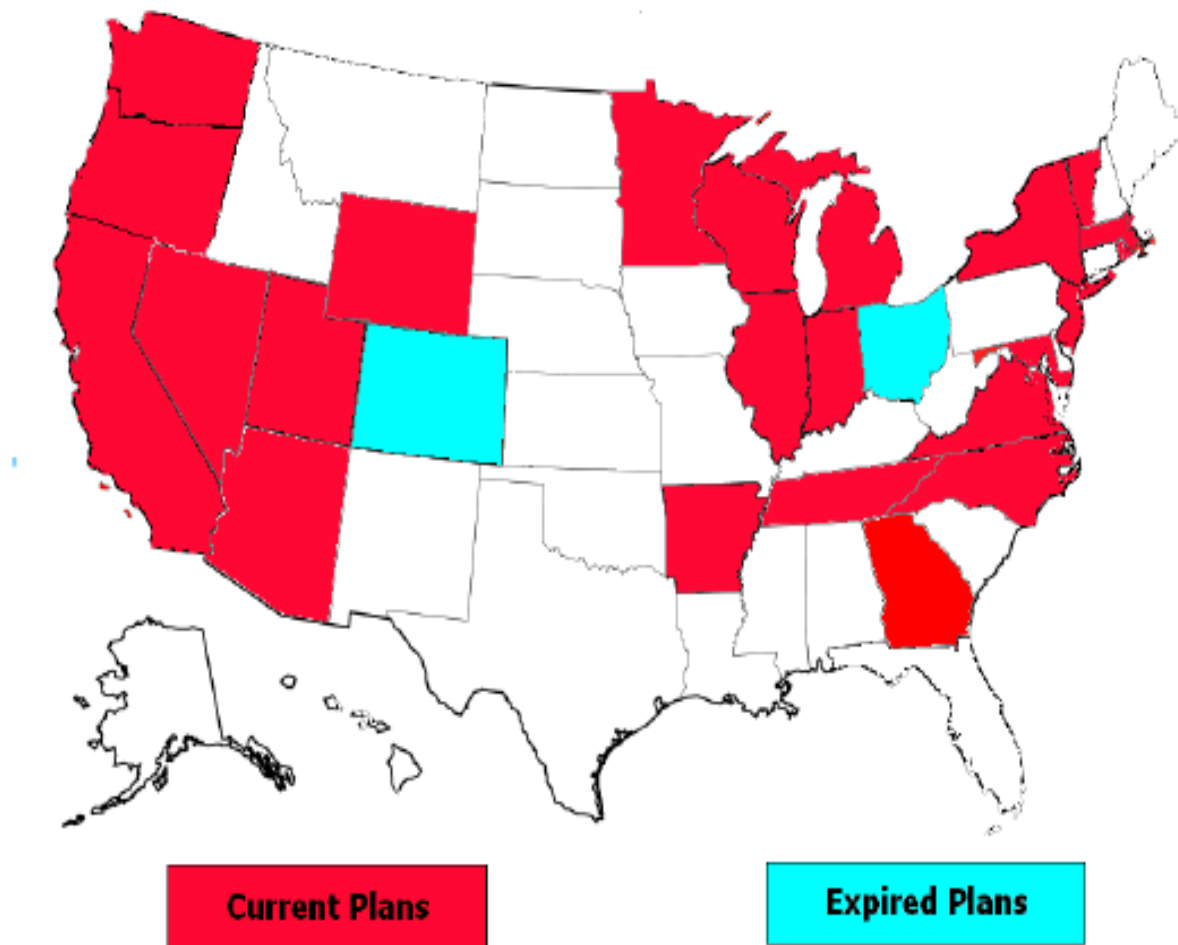


Figure 5a: Electric Decoupling True up Plans by State

