BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Establishment of a	)	
Collaborative Working Case Dedicated to	)	File No. EW-2026-_____
A Statewide MEEIA Feasibility Study	)	

NOTICE OF FILING STATEWIDE MEEIA FEASIBILITY STUDY

COME NOW Evergy Metro, Inc. d/b/a Evergy Missouri Metro ("EMM"), Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("EMW"), (collectively the "Company"), Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri"), the Office of the Public Counsel ("OPC"), and Renew Missouri ("Renew Missouri") (collectively, the "Parties") and file a *Statewide MEEIA Feasibility Study* ("Feasibility Study"). In support thereof, the Parties state as follows:

1. On September 27, 2024, the Company, OPC, and Renew Missouri submitted a *Stipulation and Agreement* ("Agreement") to the Missouri Public Service Commission ("Commission") for approval in File Nos. EO-2023-0369/0370. The Agreement was approved by the Commission's *Order Approving Agreement and Tariffs* ("Order") issued December 11, 2024, with an effective date of January 1, 2025.

2. Similarly, on October 30, 2024, Ameren Missouri, OPC, Consumers Council of Missouri ("CCM"), and Renew Missouri submitted an agreement to the Commission for approval in File No. EO-2023-0136. The agreement was approved by the Commission's *Order Approving Non-Unanimous Stipulation and Agreement* issued November 14, 2024, with an effective date of November 24, 2024.

3. Under the respective agreements, the Signatories agreed to conduct a MEEIA Feasibility Study and open a non-contested workshop docket with certain considerations.

4. The required *Feasibility Study* performed by Opinion Dynamics is attached hereto as **Exhibit A**.

5. Results of the Feasibility Study are to be filed in the non-contested workshop docket and a presentation of the findings will be made to the Commission at a future Agenda, which has now been scheduled for February 25, 2026.

WHEREFORE, the Company respectfully submits the Feasibility Study pursuant to the Agreement.

Respectfully submitted,

/s/ Roger W. Steiner

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CERTIFICATE OF SERVICE

The undersigned certifies that true and correct copies of the foregoing have been e-mailed to counsel of record for all parties this 18th day of February 2026.

/s/ Roger W. Steiner

Roger W. Steiner

Opinion Dynamics
an E Source Company

MISSOURI STATEWIDE MEEIA FEASIBILITY STUDY REPORT

FINAL

1/30/2026

ACEEE
Smart Energy. Clean Planet. Better Lives.

CONTENTS

1. Executive Summary 5
    1.1 Energy Affordability 6
    1.2 Key Findings and Recommendations 7
2. Introduction 10
3. Demand Side Management in Missouri 12
    3.1 Missouri DSM Challenges and Context 12
        3.1.1 Challenges with Missouri's Current Energy Efficiency Program Model 12
        3.1.2 Missouri Legislative Context 13
    3.2 Missouri Energy Customers 16
    3.3 Regional Transmission Organizations in Missouri 17
        3.3.1 Implications of RTO/ISO Requirements for Statewide Demand Side Programs 19
4. Program Cost Savings 23
    4.1 Administrative costs 24
    4.2 The Cost of Energy Efficiency 26
    4.3 Bulk Purchasing 27
5. Governance and Oversight 29
    5.1 Establishing a New Administrative Model 30
        5.1.1 Legislative Strategy 31
        5.1.2 Implementation Timelines 33
    5.2 Fostering Collaboration 33
    5.3 Reducing Complexity 36
        5.3.1 Customer and Trade Ally Experience ... 37
        5.3.2 Reducing Regulatory complexity 38
6. Customer Access and Portfolio Performance 41
    6.1 Access to Programs and Services 42
    6.2 Energy Savings 45
    6.3 Demand Response 46
    6.4 Cost Recovery Models 47
7. Findings and Recommendations 49
    7.1 Cost Savings 50
    7.2 Governance and Oversight: Fostering Collaboration and Reducing Complexity 51
    7.3 Increasing Customer Access and Portfolio Performance 52

Appendix A. Comparison State Case Studies 53
    Oregon CASE STUDY 53
        Program History 53
        Program Context 53
        Planning, Reporting, and Evaluation 54
    Maryland CASE STUDY 55
        Program History 55
        Program Context 55
        Planning, Reporting, and Evaluation 56
    Massachusetts CASE STUDY 57
        Program History 57
        Program Context 57
        Planning, Reporting, and Evaluation 58
    New Jersey CASE STUDY 59
        Program History 59
        Program Context 59
        Planning, Reporting, and Evaluation 59
    Vermont CASE STUDY 60
        Program History 60
        Program Context 60
        Planning, Reporting, and Evaluation 61
    Wisconsin CASE STUDY 62
        Program History 62
        Program Context 62

Planning, Reporting, and Evaluation 63
Louisiana CASE STUDY 64
Program History 64
Program Context 64
Planning, Reporting, and Evaluation 65
South Carolina CASE STUDY..................................... 66
Program History 66
Program Context 66
Planning, Reporting, and Evaluation 66
Appendix B. Research and Analysis Framework......... 68
Study Overview 68
Data Collection 71
Appendix C. Model Legislative Language 74
Introduction 74
Language to Update MEEIA with Greater Legislative Specificity 75
Appendix D. Missouri Utility Customer Demographics 79
Customer Demographics 79
Missouri's Industries and Energy Consumption....... 80
Appendix E. Regional Transmission Organizations ... 83
Impacts on RTO Inputs for DSM Resources 86
Impacts on Utility Resource Adequacy Outcomes.... 86
Appendix F. Statewide DSM Financing Programs 88
Introduction 88
Method 88
Existing EE Financing Program Types and Attributes in Missouri 88
PAYS® in Other States 92
Financing Program Types and Attributes in Other States 92
Revolving Loan Funds: California GoGreen Statewide Financing Case Study 92
Green Banks: Connecticut Green Bank Statewide Financing Case Study 93
Conclusions and Recommendations 95
Appendix G. Emerging Technologies and Innovative Program Designs 96
Emerging Technologies 96
Innovative Program Designs 99
Conclusions and Recommendations 102

TABLES & FIGURES

Table 1. Missouri DSM Stakeholder Administrative Model Policy Interests 5
Table 2. Description of Comparison States................. 5
Table 3. Missouri DSM Stakeholder Administrative Model Policy Interests 10
Table 4. Demographics by Utility Service Territory ... 16
Table 5. Electric Energy Consumption by Utility Service Territory 17
Table 6. Demand Response Resource Participation Pathways in Wholesale Markets 18
Table 7. Comparison State Rubric—Cost Savings..... 23
Table 8. Cost Savings Summary 24
Table 9. Summary of Non-Incentive Spending in Statewide Programs, Compared to Missouri's Large Electric Utilities 26
Table 10. Summary of Governance and Oversight Rubric Scoring Metrics... 29
Table 11. Governance and Oversight Rubric Scores by State 30
Table 12. Summary of High-Level Policy Drivers of a Statewide Administrative Shift 31
Table 13. Energy Efficiency Resource Standard (EERS) Targets 34
Table 14. Summary of IRP process alignment with DSM planning in focal states with IRPs 39

Exhibit A
Page 3 of 103

Table 15. Comparison of State EM&V Requirements 40
Table 16. Summary of Energy Savings Scoring Metrics 41
Table 17. Rubric Scores for Customer Access and Achieving Savings Goals across Focal States 42
Table 18. Utility/Statewide Administrator DSM Program Offerings in Focal States 43
Table 19. Utility Program Administrator Portfolio Energy Savings 46
Table 20. Comparison State Cost Recovery Mechanisms 47
Table 21. Missouri Policy Interests 49
Table 22. Missouri Stakeholders' Policy Interests 68
Table 23. Comparison State Summary 69
Table 24. Research and Analysis Framework and Data Collection Elements 69
Table 25. Scoring Rubric Overview 71
Table 26. Primary Data Collection Activities 72
Table 27. Demographics by Utility Service Territory 80
Table 28. Energy Consumption by Utility Service Territory 81
Table 29. MISO and SPP DR Participation Pathway Detailed Assessment 84
Table 30. Missouri Existing EE Financing Program Types and Attributes 91
Table 31. Example Statewide Financing Programs 94
Table 32. Potential Emerging Technologies for Missouri Programs 96
Table 33. Potential Innovative Program Designs for Missouri Programs 99

Figure 1. ACEEE Analysis of Levelized Cost of Energy (Lazard 2025) 7
Figure 2. Comparison States by Year of Administrative Shift 10
Figure 3. Decision-Making Structure in Missouri Following Passage of SB4 in 2025 15
Figure 4. Cost Comparison: Energy Efficiency Programs by Administrative Model to Major Utilities' Average Cost 27
Figure 5. Conceptual Model in Relative Strength of Legislative Directives across Focal States 32
Figure 6. Prominent Industrial Energy Consumption in Utility Service Territories 82

I. EXECUTIVE SUMMARY

Following the Missouri Public Service Commission's (PSC) Order No. EO-2023-0136,[1] the Missouri statewide demand-side management (DSM) stakeholders contracted with Opinion Dynamics and the American Council for an Energy-Efficient Economy (ACEEE) (the "study team") to evaluate the feasibility of switching to a variant of a statewide administrative model for their DSM programs. The study team examined several factors in Missouri, including a range of policy reasons behind stakeholders' potential interest in adopting a different model (Table 1), and compiled a list of comparison states that have transitioned their administrative models to identify drivers and lessons learned that could be relevant to Missouri. Additionally, the study team developed sample legislative language (see Appendix C) that could serve as a guide to draft legislation that would move Missouri's DSM programs to a more centralized administrative structure.

Table 1. Missouri DSM Stakeholder Administrative Model Policy Interests

Policy Interest	Description
Cost Savings	Opportunities to find efficiencies and cost savings from moving to a statewide/hybrid model
Customer Access	Ensuring customers across Missouri maintain (or have increased) access to DSM programs and services
Governance and Oversight	Maintaining appropriate governance while reducing complexity, promoting collaboration among stakeholders
Achieving Savings Goals	Ensuring energy and demand savings performance and achieving DSM goals

We drew on the study team's experience and collaborated with Missouri's DSM stakeholders to identify eight comparison states as the primary focus for our data collection activities. Table 2 shows these states, along with the year each initiated its most recent shift towards a fully statewide administrative model or a combination of statewide and utility-led models (i.e., hybrid model). Of the comparison states, only Louisiana did not employ legislation to switch models and utilities continue to individually administer DSM programs.

Table 2. Description of Comparison States

State	Year Initial Legislative Policy was Passed	Current Model Type	Administrative Model Trajectory
Oregon	1999	Statewide administrator	Utility-administered to a statewide nonprofit administrator
Vermont	1999		Utility-administered to a statewide nonprofit administrator
Wisconsin	2005		State agency administered to a statewide nonprofit administrator
Maryland	2005	Hybrid	Utility-administered to a utility-administered with centralized statewide branding and review, plus a state agency-administered low-income program (hybrid)
Massachusetts	2008		Utility-administered to a utility-administered with centralized statewide branding and review (hybrid)

[1] Ameren filings: MO PSC, *File No. EO-2023-0136* (2023). Accessed here. Evergy filings: MO PSC, *File No. EO-2023-0369* (2023). Accessed here.

State	Year Initial Legislative Policy was Passed	Current Model Type	Administrative Model Trajectory
New Jersey	2018		State agency administered to utility-administered, plus a statewide low-income program
South Carolina	2025	Utility-administered	Utility-administered, with a legislative mandate to explore alternative administrative structures
Louisiana	N/A [A]		Utility-administered to statewide administrator approved, then reversed, returning to utility-administered

[A.] Louisiana's attempt to shift its administrative model was achieved through regulatory rulemaking and non-legislation.

To address the study objectives, the team employed a series of qualitative research methods. We began with two facilitated meetings with Missouri DSM stakeholders to identify current portfolio challenges, policy issues a new model might address, and eight comparison states. Next, we conducted in-depth interviews with experts from the comparison states (n=11) and individuals experienced in DSM implementation in Missouri and those states (n=4), augmented by an extensive review of relevant research, legislation in comparison states, and other secondary sources. Finally, we interviewed Missouri stakeholders to explore the political context, assess perceived challenges and opportunities, and gather preferences regarding alternative administrative models. We also completed literature reviews to assess opportunities for statewide administration of DSM financing and emerging technology programs, and present their findings and recommendations in Appendix F and Appendix G, respectively.

1.1 ENERGY AFFORDABILITY

Our team identified cost and affordability as key policy concerns of Missouri DSM stakeholders in addressing their DSM portfolios. Making electricity bills more affordable begins with minimizing energy and capacity costs while maintaining grid reliability. As shown in Figure 1, utility energy efficiency programs cost about $21/MWh on average, which is the lowest of any energy resource and two to four times less expensive than gas.[2] The best-run utility load flexibility programs achieve peak demand reduction at less than $45/kW-year, compared to $52–$86/kW-year for the least expensive supply-side alternative. Demand-side measures' ability to delay or defer grid infrastructure upgrades has earned them the moniker "non-wires alternatives" and is a major reason why DSM programs have been a popular option for states seeking to manage load growth affordably.

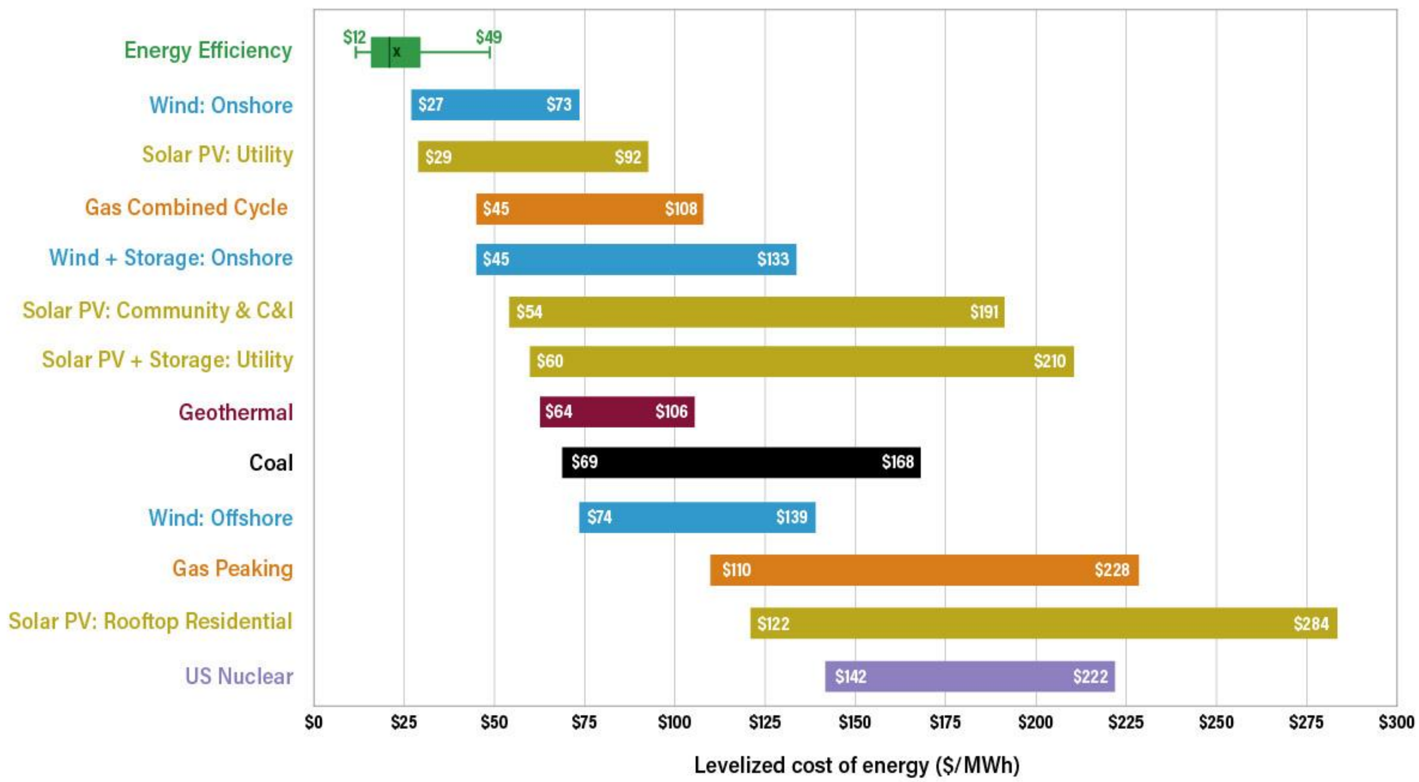
Demand-side measures also act as a hedge against the risk posed by rising energy prices. New large loads, including those from data centers, have led to a global shortage of power equipment such as turbines and transformers. This has increased procurement wait times to five years or more, a delay that has contributed to a cost increase for building new gas plants to as much as $2,800 per kW.[3] Having rapidly-deployable demand side resources can substantially increase the speed at which power can be made available for new large loads; estimates in early 2025 suggest that a virtual power plant (VPP) can add 20 MW of dispatchable peak load capacity in only 6–12 months, while it can take 20–60 months to add a gas peaker plant or utility-scale battery.[4] Recent changes in trade policy and tariffs also introduce considerable price uncertainty.[5] Distribution system upgrades are estimated to cost tens of billions of dollars per year for large utilities. Taken together, the inflated cost of building and connecting supply-side resources would compel

[2] Note that these cost-per-kilowatt ranges were based on analyses published in June of 2024, and the cost of supply-side resources may have continued to rise over subsequent years. Source: Lazard's Levelized Cost of Energy. 2024. Accessed here.
[3] Rathi, A., Stapczynski, S., & Saul, J. *The Gas Turbine Shortage Might Be a Climate Problem* (2025). Accessed here.
[4] Razdan, Sonali et al. *Pathways to Commercial Liftoff: Virtual Power Plants 2025 Update* (US Department of Energy, 2025). Accessed here.
[5] Rathi, A., Malik, N., & Tsoi, T. "The Device Throttling the World's Electrified Future." (2025). Accessed here.

utilities to seek significant rate increases, according to credit rating agencies.[6] These anticipated rate increases amplify the value of energy-saving measures, which help both program participants and utilities avoid those increased costs.[7]

Additionally, there is potential to reduce the overall cost of energy investment portfolios by increasing the proportion of energy efficiency and demand response investments. If statewide administrative models successfully expand investment in energy efficiency as a resource, it may result in additional cost savings for customers. For example, a recent study of energy efficiency program investments across the northeast found that, on average, every dollar of energy efficiency investment led to $2.93 of system benefits.[8] The reduction in sales and reduced need to invest ratepayer funds in additional infrastructure to serve higher demand leads energy efficiency to be the least cost resource in utility portfolios, on average, with energy efficiency costs ranging from $12–$49/MWh. This is comparable to wind and solar resources and, in many cases, lower-cost and substantially less than gas, geothermal, or solar plus storage investments. Especially at times of peak demand, energy efficiency is less than half the cost of gas peaking plants (Figure 1).

Figure 1. ACEEE Analysis of Levelized Cost of Energy (Lazard 2025)[9]



1.2 KEY FINDINGS AND RECOMMENDATIONS

Below, we detail several key findings and recommendations from this study. See Section 7 for the full set of findings and recommendations.

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[6] Fitch Ratings. *North American Utilities Outlook 2025* (2024). Accessed here.

[7] S&P Global Ratings. *Industry Credit Outlook 2025: North America Regulated Utilities* (2025). Accessed here.

[8] Butterworth, Ben & Paola Moncada Tamayo. *Efficiency Ahead: How State Energy Efficiency Plans are Driving Utility Bill Savings and Benefits Across the Northeast* (Acadia Center, 2025). Accessed here.

[9] Specian, M. and A. Aquino. *Lightening the Load: Demand-Side Solutions for the New Era of Explosive Electric Load Growth* (ACEEE, 2026).

- **The DSM framework created by the Missouri Energy Efficiency Investment Act (MEEIA) requires some adjustments to address Missouri's current and future energy needs more effectively.** Missouri's DSM program framework has not undergone substantial updates in over a decade, leaving rules and goals outdated and misaligned with current market and policy conditions. Administrative processes are overly complex, characterized by frequent and time-consuming reporting and approval cycles, as well as inconsistencies stemming from variations in utility technical resource manuals and evaluator practices. Program access and benefits are uneven across the state—rural customers and those served by small municipal and cooperative utilities often lack the same opportunities as customers of larger investor-owned utilities. Additionally, the absence of cost-recovery mechanisms for gas utilities limits incentives for investment in energy efficiency, further constraining program reach and impact.
- **Comparison states moved to shift the administrative structure of their DSM model in response to specific policy concerns.** In several states, the design and evolution of DSM administrative models have been strongly influenced by policy drivers. Legislative mandates, regulatory priorities, and state energy goals have served as catalysts for adopting alternative structures, such as independent administrators or the establishment of a statewide DSM brand, aimed at improving access, portfolio performance, consistency, reducing administrative burden, and aligning programs with broader policy objectives.
  - **Recommendation:** Clarify and prioritize policy drivers for Missouri's DSM portfolios. Based on this study, we understand the major policy priorities of DSM administrative models for Missouri DSM stakeholders to include: Reducing the cost required to operate these programs, thereby reducing the cost borne by Missouri's customers; reducing the complexity of DSM programs from a customer and regulatory perspective; enhancing collaboration across DSM stakeholders in the State; and expanding access to DSM programs and overall portfolio performance. We recommend that DSM stakeholders engage additional participants (e.g., state legislators, electric co-operatives, municipal utilities) to validate these priorities and establish consensus on which drivers should be emphasized as Missouri considers adjustments to its DSM administrative model.
- **The DSM administrative model alone does not drive cost efficiency.** Qualitative evidence from comparison states with fully statewide administrative models indicates that statewide models do not inherently reduce administrative expenses, especially in the short-term. While some DSM experts noted that there are likely longer-term cost efficiencies resulting from having a single statewide administrator, they also acknowledged that establishing an administrator would likely incur upfront costs. It is also important to note that administrative cost savings were not among the chief goals for establishing a statewide model in our comparison states that had done so (i.e., Oregon, Vermont, and Wisconsin), but rather these states were focused on expanding program access and improving overall portfolio performance. In 2024, the average share of non-incentive spending[10] under statewide models was approximately 47% of total DSM expenditures, compared to 35% for Missouri's largest, regulated utilities (see Table 9). This does not, however, account for the dozens of other co-ops, municipal utilities, and other small utilities in the state that may be seeing much higher non-incentive costs. This suggests that while statewide models may offer benefits such as improved consistency, customer access, and stakeholder coordination, they may not materially reduce the costs of administering DSM programs.
- **Supporting components, not the administrative model alone, drive complexity reduction and collaboration.** The study found that while adopting a statewide administrative model can help reduce complexity and foster collaboration, these benefits are largely achieved through supporting components rather than the model itself. Mechanisms such as statewide planning and evaluation tools, clear protocols, and standardized processes were reported by DSM experts as critical for improving collaboration and consistency. Additionally, a statewide

[10] Non-incentive spending is a broad category that covers the wide range of utility expenditures that fall outside of direct program incentive spending. This can include administrative overhead, but also covers categories such as contractor support, outreach and marketing, evaluation, and other program aspects that may constitute essential supports for effective program delivery. Utilities vary widely in how they characterize administrative vs. non-administrative spending.

framework can simplify experiences for customers, trade allies, and stakeholders as they navigate planning and evaluation processes.

  - **Recommendation.** Consider establishing a statewide framework of common DSM metrics, such as Energy Efficiency Resource Standards (EERS) and cost-effectiveness standards, supported by standardized protocols, shared planning tools, and consistent processes. These types of changes can be implemented under the current MEEIA framework or could be included as part of any adjustment to Missouri's administrative model. These components, rather than the administrative model alone, are key to reducing complexity, fostering collaboration, and simplifying customer and stakeholder experiences.
  - **Recommendation:** Explore further coordination and consolidation of program delivery under the existing DSM model. Missouri DSM stakeholders should consider further consolidating program delivery as a potential strategy to reduce complexity and improve consistency. The state is already exploring contracts with a statewide evaluator, and existing programs are co-delivered by multiple utilities under a single implementer. Expanding upon this approach may require enhanced coordination, including the development of a statewide Technical Resource Manual (TRM), alignment of program designs, and agreement on contractual terms among utilities. If implemented effectively, this strategy could streamline processes, reduce duplication, and improve overall portfolio performance, while building on the models of successful co-delivery of programs in Missouri that have already occurred.

- **Well-structured stakeholder advisory groups enhance collaboration and inclusivity.** Stakeholder advisory groups with clearly defined roles in the regulatory approval process and balanced membership can significantly improve collaboration across DSM stakeholders. Successful models in other states often include a dedicated facilitator and representation from a broad range of expertise, including DSM programming, public housing, the commercial and industrial sectors, residential programs, and policymaking. Additionally, reimbursing participants for their time, particularly customer advocates, public housing representatives, and stakeholders serving low-income communities, helps ensure equitable participation and diverse perspectives in decision-making.
  - **Recommendation**: Reinvigorate the Missouri Energy Efficiency Advisory Collaborative (MEEAC) by clarifying its role in the regulatory process, updating membership to ensure balanced representation across sectors, and appointing a dedicated facilitator to drive progress towards shared goals across the State. Consider establishing a mechanism to provide a stipend or some financial reimbursement to encourage participation from organizations representing low-income communities, public housing, and customer advocates. The framework for stipends and financial reimbursement has been established through regulatory rulemaking or statute in comparison states.[11]

[11] National Association of Regulatory Utility Commissioners. *State Approaches to Intervenor Compensation* (2021). Accessed here.

2. INTRODUCTION

Following the Missouri Public Service Commission's (PSC) Order No. EO-2023-0136,[12] the Missouri statewide demand-side management (DSM) stakeholders contracted with Opinion Dynamics and the American Council for an Energy-Efficient Economy (ACEEE), the study team, to evaluate the feasibility of switching to a variant of a statewide administrative model for their DSM programs. The study team examined several factors in Missouri, including a range of policy reasons behind stakeholders' potential interest in adopting a different model (Table 3), and compiled a list of comparison states that have transitioned their administrative models to identify drivers and lessons learned relevant to Missouri. Additionally, the study team developed sample legislative language (see Appendix C) that could serve as a guide to draft legislation that would move Missouri's DSM programs to a more centralized administrative structure.

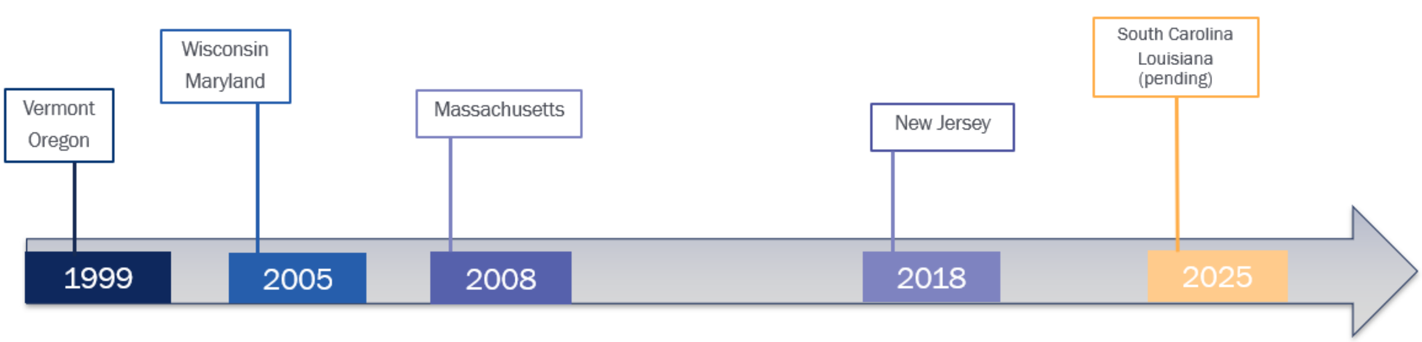
The study team collaborated closely with Missouri's DSM stakeholders over four months to execute this study. First, the study team conducted a series of facilitated meetings with stakeholders to identify the key policy issues influencing decision-makers in the state to consider different administrative models for its regulated DSM portfolios. We then gathered and analyzed data to develop recommendations for stakeholders, including sample legislative language. Through a collaborative process, Missouri stakeholders identified the key policy drivers in Missouri highlighted in Table 3.

Table 3. Missouri DSM Stakeholder Administrative Model Policy Interests

Policy Interest	Description
Cost Savings	Opportunities to find efficiencies and cost savings in moving to a statewide/hybrid model
Governance and Oversight	Maintaining appropriate governance while reducing complexity, promoting collaboration among stakeholders
Customer Access	Ensuring customers across Missouri maintain (or have increased) access to DSM programs and services
Achieving Savings Goals	Ensuring energy and demand savings performance and achieving DSM goals

We then drew on the study team's experience and worked with Missouri's DSM stakeholders to identify eight comparison states as the main focus for our data collection activities. Figure 2 shows the list of eight comparison states, along with the year each initiated its shift towards a fully statewide administrative model or a combination of statewide and utility-led models (i.e., hybrid model).

Figure 2. Comparison States by Year of Administrative Shift



After identifying the key policy drivers in Missouri and focal states to serve as comparison points, our team developed a research framework to guide our analysis. The framework comprises individual topics, or elements, that we collected

[12] MO PSC, *File No. EO-2023-0136* (2023). Accessed here.

through in-depth interviews or secondary data review. We then analyzed those data to assess the degree to which the shift to a different administrative model in the comparison states produced a positive, neutral, or negative result along the lines of each of the policy drivers listed in Table 3. For the comprehensive research and analysis framework, including a description of our scoring rubrics for each policy driver, see Appendix B.

The study team completed the following data collection tasks:

- **Interviews with experts in comparison states (n=11).** These experts included individuals with years, in some cases decades, of experience working in program administration, implementation, or oversight capacities in one or more of the comparison states. We used data from these interviews for our analysis of administrative models across all eight comparison states.
- **Interviews with DSM implementation contractors (n=4).** DSM implementation contractors included representatives from organizations responsible for implementing DSM programs in Missouri and the comparison states. Additionally, we conducted one informal interview with an implementation contractor to gather further perspectives on the implications for administering statewide demand response programs and parameters within regional transmission operator (RTO) and independent system operators (ISO) structures.
- **Secondary data collection:** The study team gathered critical data and insights from publicly available sources, including evaluation reports, DSM program plans, national energy policy reports, economic impact studies, and other available sources. The study team also reviewed program landing pages and public databases to obtain detailed information about DSM programs and technologies, as well as utility customers. We also reviewed enabling legislation and other policy documents in the comparison states. Finally, we reviewed ISO/RTO tariffs, business practice manuals, market protocols, planning criteria, and the resource adequacy workbook as part of our analysis of wholesale markets.
- **Interviews with Missouri DSM stakeholders (n=8).** These stakeholders included representatives from Missouri's investor-owned gas and electric utility companies (Ameren, Evergy, Spire, and Liberty Utilities), nonprofit organizations that are often parties or interveners in DSM matters in Missouri (Renew Missouri), customer and public housing advocates (Tower Grove Community Development Corporation), and representatives from the Missouri State office (Public Service Commission and Office of Public Council). Data from these interviews helped inform the context for DSM in Missouri and stakeholder preferences for moving forward with it in the state.

3. DEMAND SIDE MANAGEMENT IN MISSOURI

In addition to DSM policy, it is critical to consider the underlying, higher-level policy priorities and concerns that drive energy decision-making within the state. Two primary drivers of energy policy in Missouri are concerns around anticipated **load growth and grid reliability**. Data centers and new companies entering the state are poised to substantially increase statewide energy demand over the next decade. Major data centers are being rapidly built to accommodate market growth in artificial intelligence (AI), and several are expected to come online in Missouri over the next decade, contributing significantly to the state's energy demand.[13] To accommodate this new demand, Ameren Missouri plans to add 1.8 GW of energy capacity by 2030 from renewable and natural gas sources.[14] There are also concerns in Missouri around **rising energy costs and affordability**. While rates are lower in Missouri than the national average, energy costs still increased 6% over the last year, faster than the rate of inflation.[15]

There is broad support among DSM stakeholders for finding ways to mitigate energy costs for customers while also promoting economic growth throughout the State. According to the interviews, most DSM stakeholders identified energy affordability as the most important driver of energy efficiency in the state. In the words of two stakeholders,

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"What I'm hearing now is affordability. There seems to be momentum nationally [for affordability] and in Missouri. I think affordability is current and I think it is the best way to get through to people who resonate with the term."

"Affordability is a big one, and then also making sure we can meet our energy needs. I think affordability is going to be one of the biggest drivers on [DSM] programs and making sure individuals aren't left behind. I tend to lean on affordability as the driving force."

3.1 MISSOURI DSM CHALLENGES AND CONTEXT

In addition to a strong focus on aligning DSM programming with energy affordability goals, Missouri stakeholders also identified a need to streamline, simplify, and standardize budget and program planning, to help overcome the sometimes contentious DSM program approval processes in the new context of demand growth and affordability concerns: "the model has delivered significant cost savings and benefits […] but we're finding as we're starting to build out more generation transmission that securing stakeholder commissioner approval has been very challenging as we seek to adapt the future energy need and demand."

3.1.1 CHALLENGES WITH MISSOURI'S CURRENT ENERGY EFFICIENCY PROGRAM MODEL

Interviews with Missouri DSM stakeholders identified a range of challenges with the state's current DSM program model. The themes of these concerns are summarized below:

- **Energy efficiency is not widely perceived as a cost-effective strategy for addressing affordability and managing demand growth.**

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13 Schleis, Jana Rose. *Growth in Artificial Intelligence Puts Pressure on Missouri Energy Generation (*Missouri Independent, 2024). Accessed here.
14 Ameren Missouri. "Ameren Missouri Unveils Plan to Enable Economic Growth, Boost Reliability and Create Jobs in the State." (2025). Accessed here.
15 Schleis, Jana Rose. *State Regulators Look into Energy Affordability and Assistance Programs* (KBIA, 2025). Accessed here.

- Despite Integrated Resource Planning (IRP) models identifying energy efficiency as a least-cost resource, regulatory budget approvals fall significantly short of cost-effective levels, and its capacity value remains underrecognized. See Table 14 for a summary of how comparative states incorporate energy efficiency into IRP planning processes.
- Shifts in Missouri's policy landscape since the passage of the Missouri Energy Efficiency Investment Act (MEEIA) have altered foundational assumptions, leading to differing views among decision-makers on DSM's role in addressing current challenges such as load growth and affordability.
- As demand grows, communicating DSM's value for reducing customer bills has become more difficult, as new generation resources to meet load growth drive bill increases, even alongside ongoing efficiency investments.
- There is a prevailing perception that utility cost recovery for energy efficiency is overly generous, positioning DSM investments primarily as a source of additional utility profits.

- Missouri's DSM program models and processes could be more effective.
  - The DSM program models in comparison states have gone through continuous evolution as policy priorities and technology have changed; however, Missouri's DSM program structures, rules, and goals have not been substantially updated for over a decade. While the existing MEEIA legislation allows broad flexibility for PSC staff and DSM stakeholders to explore new administrative models, there may also be opportunities to update incentive structures and incorporate DSM into integrated resource planning processes.
  - The current regulatory processes are administratively burdensome, characterized by short, time-intensive reporting and approval cycles, and inconsistencies stemming from varying utility technical resource manuals and evaluator practices.
  - Program access and benefits are uneven across Missouri. Because municipal utilities and cooperatives are outside the PSC's purview, administering DSM programs is voluntary. Consequently, some utilities offer DSM programs for their customers, while others often lack the same opportunities available to customers of larger utilities. While some cooperatives and municipal utilities appreciate the ability to limit portfolio offerings and focus on meeting specific and localized customer needs, this flexibility comes at the cost of consistent access to a wide range of programs across the state.
  - No cost-recovery mechanisms exist to incentivize gas utilities to invest in energy efficiency.

3.1.2 MISSOURI LEGISLATIVE CONTEXT

Energy efficiency in Missouri is primarily driven by legislation adopted in the late 2000s and has not seen substantial changes in over a decade. In 2008, the Missouri state legislature passed Senate Bill 1181, which required that all public and state-owned buildings over 5,000 square feet built or renovated on or after July 1, 2009, must at least meet the energy standards of the International Energy Conservation Code (IECC) 2006.[16] Localities may also elect to adopt more stringent and recent IECC standards. In 2009, the Missouri state legislature passed MEEIA, which enabled a voluntary structure for the state's investor-owned utilities (IOUs) to design and operate DSM programs approved by the PSC.

Over the last decade, Missouri utilities' DSM programs across the residential, commercial, and income-eligible sectors have seen abundant participation. For example, following the passage of MEEIA, over 1,666,000 residential energy customers in Missouri (70% of which are Evergy and Ameren customers) have been positively impacted by energy efficiency initiatives either through direct participation in programs or indirect bill reductions, resulting in more than 4.2

[16] Missouri State Senate. *SB 1181: Modifies and Creates Provisions Pertaining to Energy Efficiency and Energy Regulation* (2008). Accessed here.

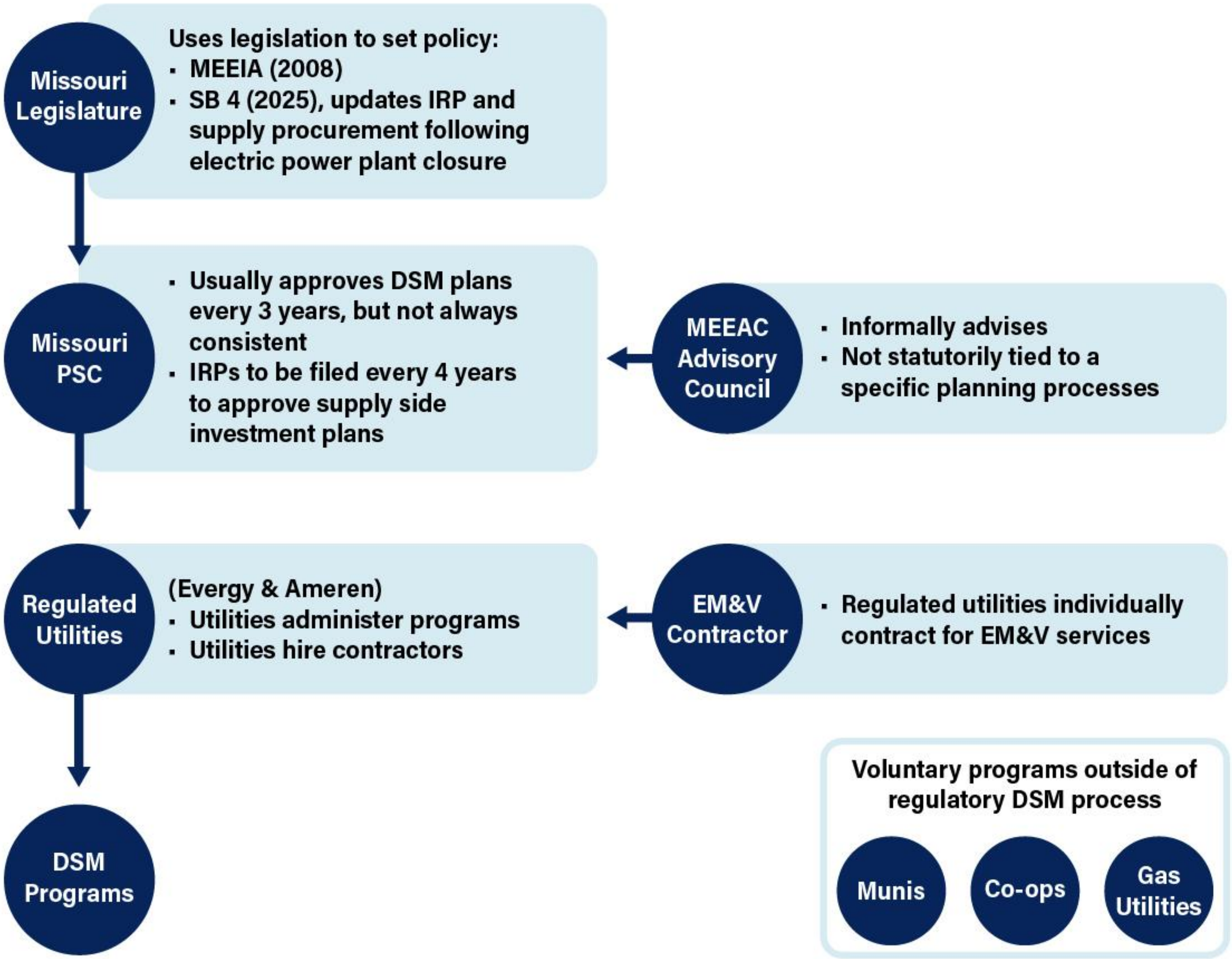
billion kWh of energy saved from 2013 to 2023. There have also been successful commercial and industrial-side programs run by Missouri utilities, including Ameren Missouri's BizSavers® program, Evergy's business energy savings offerings and demand response, and Spire's rebates on commercial products like HVAC systems and smart thermostats. During this period, energy efficiency initiatives demonstrated approximately $2 in economic benefits for every dollar spent, highlighting the value of energy efficiency investments and programs in the state.[17] For example, from July 2024 to July 2025, 230 of Ameren Missouri's commercial customers saved a total of over $2.9 million on their energy efficiency bills after upgrading to high-efficiency HVAC systems.[18] These programs and investments have yielded cost and energy savings, improving the quality of energy infrastructure for customers and delivering economic benefits to the state. They have also encouraged hundreds of energy trade professionals to participate in Missouri's energy efficiency market. Currently, more than 150 contractors participate in Ameren Missouri's BizSavers® program.[19] Additionally, 400 approved contractors in Missouri serve Evergy's programs, providing HVAC services, energy audits, and insulation and air sealing services.[20]

The Missouri legislature is the governing body responsible for setting energy and energy efficiency policy in the state. Historically, the legislature has not frequently been involved in DSM programming in the state beyond the rules outlined in MEEIA, but it retains the ability to mandate additional energy efficiency policies or regulations as it sees fit. The PSC is the primary oversight and approval body for DSM programming, with significant input from the Office of Public Counsel, and sets rules and approves IRPs for the main IOUs in the state.

While the PSC and state legislature set and approve energy efficiency policy and regulatory structures, other stakeholders advise and shape energy efficiency across the state's DSM portfolio. Figure 3 depicts the current decision-making structure and the various parties that drive DSM forward in Missouri. In 2017, the PSC chartered the Missouri Energy Efficiency Advisory Collaborative (MEEAC), a group of Missouri DSM stakeholders that meets throughout the year to coordinate energy efficiency efforts and provide feedback on how utilities can improve their programs and offerings.[21] The impetus for this group was to bring additional voices into the energy efficiency conversation, advise the PSC, and pinpoint areas for DSM portfolio improvement. Based on our interviews with DSM stakeholders, MEEAC's low-income working group (which focuses on advancing energy efficiency for lower-income Missouri customers) has been particularly effective and may serve as a model for other working groups stemming from MEEAC to advance specific DSM goals.

[17] Midwest Energy Policy Series (2023). Accessed here.
[18] PR News Wire. *Missouri Businesses Save over $2.9 Million from Energy-Efficient HVAC Upgrades* (2025). Accessed here.
[19] Ameren Missouri. *Get Started with BizSavers®.* Accessed here.
[20] Evergy. *Find an Evergy-Authorized Contractor*. Accessed here.
[21] Charter of the Missouri Energy Efficiency Advisory Collaborative (2017). Accessed here.

Figure 3. Decision-Making Structure in Missouri Following Passage of SB4 in 2025



Today, the primary regulatory forum that Missouri uses for planning and managing energy efficiency investments across the state is the MEEIA regulatory dockets. Missouri does not have a statewide building energy code for private residential and commercial construction, leaving localities the discretion to implement and enforce their own standards for building energy efficiency.[22] Additionally, Missouri's IOUs are operating under their fourth program plan, filed with the PSC, known as "MEEIA Cycle 4." MEEIA does not set binding energy or demand savings targets for these programs, but programs must align with cost-effectiveness criteria (except for low-income programs) for operating utilities. However, DSM programs overseen by PSC must achieve certain savings targets and meet other performance criteria to qualify for performance incentives (i.e., earning opportunities) beyond basic cost recovery. Each regulated utility is required to submit annual reports to the PSC documenting how its DSM programs performed during the previous year, including program spend, energy savings impacts, predicted economic benefits, and cost-effectiveness. Under MEEIA, the PSC is empowered to issue rulemaking requiring the independent evaluation of DSM programs under its purview, as well as to explore alternative administrative models for DSM. The fourth MEEIA cycle resulted in a narrower scope of

[22] Midwest Energy Efficiency Alliance. *Missouri Building Energy Codes.* Accessed here.

programs than in the previous three cycles, with the Commission approving a much smaller energy efficiency budget than was initially proposed by utilities.[23]

Recent concerns over energy affordability and demand growth have led to the passage of energy-related bills and to interest in future updates to earlier energy legislation. Newer energy legislation that may impact MEEIA processes includes Senate Bill 4. In April 2025, Governor Kehoe signed Senate Bill 4 into law, which contains a provision known colloquially as the "Watt for Watt" bill. While this provision is not about DSM directly, it has potential direct impacts on the future of DSM in the state. The provision states that, prior to decommissioning an existing electricity generation source, Missouri electric utilities must demonstrate to the PSC that they have secured a ready-to-use generation site of equal or greater capacity.[24] This law thus limits the use of energy efficiency as a resource, which could conflict with the current MEEIA provision, "it shall be the policy of the state to value demand-side investments equal to traditional investments in supply and delivery infrastructure…."[25]

Legislation updating the IRP process was also passed in August 2025.[26] This statute establishes a four-year IRP cycle for electrical corporations, and the PSC is then given authority to establish rules related to the reporting cycle for each utility. The PSC is required to determine if the plans describe "a reasonable and prudent means of meeting the electrical corporation's load serving obligations at just and reasonable rates," but does not specifically address the role of demand side resources in the context of the IRP process.

3.2 MISSOURI ENERGY CUSTOMERS

Missouri has a complex energy utility landscape, with a mix of IOUs, municipal utilities, and electric cooperatives. IOUs operating in the state include Ameren Missouri and its subsidiaries (which offer both gas and electric services), Evergy Missouri and its subsidiaries (which offer electric services), Liberty Utilities and its subsidiaries (which offer both gas and electric services), and Spire Missouri (which offers gas services). There are 104 operating municipal utilities in the state, and 41 electric cooperatives.[27] The utilities in the state cover various demographic groups across their service territories (Table 4).

Table 4. Demographics by Utility Service Territory

Utility	Size	Share Rural[28]	Share in Poverty[29]	Median Income
Ameren Missouri	~1.3 million Customers	61%	13%	$61,868
Evergy Missouri	~1.7 million Customers	66%	13%	$62,990
Spire Gas, Inc.	~1.2 million Customers	36%	12%	$67,810
Liberty Utilities	~164,300 Customers	76%	15%	$56,175
Missouri Electric Cooperatives	~780,000 Meters Connected	88%	14%	$58,209
Missouri Municipal Utilities	~889,000 Population Aggregate	77%	14%	$58,888

Missouri's electric cooperatives and municipal utilities serve more rural counties than IOUs in the state, although all utilities' service territories share a similar proportion of their populations below the federal poverty line. The median income across IOU service territories is generally higher than across electric cooperative or municipal utility service

[23] Newman, Natalie. *Missouri Energy Efficiency Dis-Investment Actions: The MEEIA Cycle 4 Dockets* (2025). Accessed here.
[24] *Governor Kehoe Signs SB 4 into Law, Securing Missouri's Energy Future and Economic Growth* (2025). Accessed here.
[25] Missouri Revised Statutes § 393.1075. Missouri Energy Efficiency Investment Act (2017). Accessed here.
[26] Missouri Revised Statues § 393.1080, effective August 28, 2025. Accessed here.
[27] Missouri Public Service Commission. *Find A Local Utility*. Accessed here.
[28] US Department of Agriculture, Economic Research Service. *2023 Rural-Urban Continuum Codes – Documentation* (2025). Accessed here.
[29] US Department of Agriculture, Economic Research Service. *Poverty Estimates for United States, States, and Counties, 2023* (2025). Accessed here.

territories, although there are exceptions (e.g., Columbia Water and Light's service territory, the city of Columbia, is an exception with a median income of just under $70,000).

We also reviewed the breakdown of energy demand by sector across the state. Missouri serves as a transportation hub across the US due to its central location in the Midwest. Shippers move raw materials, agricultural products, and manufactured goods by rail, river, highway, and air, which requires a tremendous energy input. In 2023, the state consumed 469 trillion British Thermal Units (BTU) for residential use, 369 trillion BTU for commercial use, 293 trillion BTU for industrial use, and 551 trillion BTU for transportation use.[30]

The 2019 Open Energy Data Initiative (OEDI) county-wide consumption data shows electricity consumption by county. Using these county-wide estimates, the study team aggregated the residential, commercial, and industrial energy consumption in each utility's service territory, summarized in Table 5. We provide a more detailed demographic analysis of Missouri's energy customers as Appendix D.

Table 5. Electric Energy Consumption by Utility Service Territory

Utility	Total Annual Consumption (mWh)[31]	Residential Energy Consumption (%)[32]	Commercial Energy Consumption (%)	Industrial Energy Consumption (%)
Ameren Missouri	43,441,545	48%	29%	23%
Evergy Missouri	20,057,926	50%	31%	19%
Liberty Utilities	9,497,237	49%	29%	22%
Missouri Electric Cooperatives	56,694,588	49%	27%	24%
Missouri Municipal Utilities	58,722,289	48%	29%	23%

Note: This table aggregates MWh consumption in each Missouri county covered by each utility's service territory. Parts of counties served by municipal utilities are also served by IOUs or electric cooperatives and these consumption figures may overlap.

3.3 REGIONAL TRANSMISSION ORGANIZATIONS IN MISSOURI

Missouri's bulk power system and wholesale electricity markets are operated within the frameworks of two RTOs: the Midcontinent Independent System Operator (MISO) and the Southwest Power Pool (SPP). RTOs are independent entities regulated by the Federal Energy Regulatory Commission (FERC) to coordinate electricity transmission, maintain reliability, and administer competitive wholesale markets across multi-state regions with open access for utilities and generators.[33]

MISO is one of the largest RTOs in North America, covering 15 states. In Missouri, its footprint spans the eastern part of the state. Today, MISO operates a co-optimized Day-Ahead and Real-Time energy market, an ancillary services market, and a forward capacity market known as the Planning Resource Auction (PRA), which procures Zonal Resource Credits (ZRCs) to meet annual Planning Reserve Requirements.[34] Notably, within MISO's PRA, market participants can choose to meet their needs by registering resources as Load Modifying Resources (LMR), which are emergency-only resources used during high-stress grid conditions, or as Demand Response Resources (DRR), which can participate directly in MISO's energy and ancillary services markets.

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[30] US Energy Information Administration. *Missouri State Energy Profile* (2025). Accessed here.

[31] The sum of annual electricity consumption in Missouri counties covered by each utility's service territory, calculated with Open Energy Data Initiative County-wide consumption data.

[32] Open Energy Data Initiative. *City and County Energy Profiles* (2024). Accessed here.

[33] FERC, *An Introductory Guide to Electricity Market Regulated by the Federal Energy Regulatory Commission* (2025). Accessed here.

[34] MISO, *Resource Adequacy* (2025). Accessed here.

SPP, founded as a power pool in 1941 and incorporated as a nonprofit in 1994, was designated an RTO by FERC in 2004. Its footprint covers portions of 14 states. In Missouri, SPP covers the western and northern part of the state. SPP operates a day-ahead market (DAM), a real-time balancing market (RTBM), an operating reserves market (Ancillary Services), and a Transmission Congestion Rights (TCR) market, which enable dispatch and price formation across its region. Unlike some other RTOs, SPP does not currently operate a centralized forward capacity market. SPP maintains resource adequacy requirements that place the responsibility on individual Load Responsible Entities (LREs) and involve the annual accreditation of capacity-related resources.

The eligibility of DSM resources to participate in MISO and SPP differs. Energy efficiency, although an important load-modifying resource in utility planning and IRP processes, is not eligible to participate in SPP. MISO allows energy efficiency to provide capacity; however, following the disqualification of sole participating providers of energy efficiency (EE) by the 2021–2022 PRA, the number of EEs participating in PRA has remained at or near zero.[35]

Demand response (DR), on the other hand, has several pathways following a series of FERC reforms to enable DR resources to enter wholesale markets (including the most recent order 2222 that allowed DER aggregation and participation in wholesale markets).[36,37] Table 6 provides an overview of pathways for DR to participate in wholesale markets. Appendix E contains additional details on the market rules, registration, accreditation, and dispatch process for each pathway. It is important to note that while MISO's rules technically allow demand response programs to participate in both the energy and capacity markets, in practice, a single resource is generally prohibited from receiving value from both markets simultaneously during the same time period. This principle, often referred to as "dual compensation" or "double counting," effectively means a DR resource must commit its capacity either as a capacity resource (earning capacity payments) or primarily as an energy market resource (earning energy market revenues), but not both. In contrast, SPP treats DR as a supply-side alternative. The 2024 MISO Independent Market Monitor report cites that nearly 95% of MISO DR was registered as LMR.

In addition to wholesale market pathways described in the table below, DR programs can support utility-driven economic or locational dispatch, for instance, to avoid high system energy costs or mitigate local constraints.

Table 6. Demand Response Resource Participation Pathways in Wholesale Markets

Feature	MISO	SPP
Energy market	Yes	Yes
Capacity market	Yes	No
Resource adequacy	Yes (Market Credits)	Yes (Physical Offsets)

DR programs administered under MEEIA may not be well-suited for energy markets given data and dispatchability requirements, but likely are eligible for dispatches aligned with utility-specific economic decisions, peak forecasts, or through MISO capacity-driven dispatches. Given different RTO structures, utilities in Missouri, namely Ameren Missouri and Evergy, pursued different pathways for their DR programs. Ameren Missouri has both of its DR programs registered in the MISO capacity market (administered through the PRA) as LMRs, with Ameren Missouri's commercial and industrial (C&I) DR program used as a year-round resource and the Residential DR program used as a summer resource. Ameren Missouri does not currently pursue economic dispatch of DR. Notably, Ameren Missouri has been

[35] https://www.potomaceconomics.com/wp-content/uploads/2025/06/2024-MISO-SOM_Report_Body_Final.pdf
[36] Federal Energy Regulatory Commission. *Demand Response.* Accessed here.
[37] Federal Energy Regulatory Commission. *FERC Order No. 2222 Explainer: Facilitating Participation in Electricity Markets by Distributed Energy Resources* (2025). Accessed here. https://www.ferc.gov/sites/default/files/2020-09/E-1_0.pdf

testing locational dispatch capabilities of its Residential DR program. SPP primarily uses capacity from its DR programs to offset its RA requirement and support economic dispatch.

FERC Order 719 directed regional grid operators, such as MISO and SPP, to allow Aggregators of Retail Customers (ARCs) to bid demand response directly into wholesale electricity markets. However, FERC included a crucial "opt-out" provision, allowing relevant electric retail regulatory authorities (RERRAs), such as state public service commissions, to prohibit this participation if it conflicted with state law or regulation.[38] Citing concerns that ARCs were a step toward retail competition, which was disfavored in its traditionally regulated market, the Missouri PSC exercised this opt-out authority. In March 2010, the PSC issued an order temporarily banning retail customers of commission-jurisdictional utilities from selling demand response into wholesale markets via third-party ARCs.[39] On October 12, 2023, the PSC issued an order partially modifying its 2010 ban, permitting C&I customers with demands of 100kW or greater and not currently participating in utility DR programs to engage in wholesale DR programs via ARCs, with the change effective on December 11, 2023. The original prohibition on ARC participation remains for residential and smaller commercial customers.[40] This change allowed for ARCs to recruit C&I customers and bid their resources into the market, primarily LMRs.

3.3.1 IMPLICATIONS OF RTO/ISO REQUIREMENTS FOR STATEWIDE DEMAND SIDE PROGRAMS

To date, the administration of MEEIA DR programs for Ameren Missouri and Evergy has followed a customized pathway, reflecting each utility's ability and strategic choice to align DR deployment with its respective wholesale market structures or system needs. Key asymmetries relevant for consideration of DR program deployment under the statewide framework include the following:

- **Program cycles.** The RTO/ISO planning timelines significantly influence how Ameren Missouri and Evergy structure their DR program cycles, leading both utilities to prioritize alignment with market timelines, in addition to the calendar-year MEEIA cycle.
  - For Ameren Missouri, registering its DR fully as an LMR in MISO binds the program to MISO's planning year, which typically runs from June 1 through May 31. Ameren Missouri must verify and count its enrolled capacity in accordance with MISO's rules well in advance of the start of the planning year to receive capacity accreditation and the associated capacity payments.
  - For Evergy in the SPP region, the lack of a capacity market shifts the focus to accurately forecasting and meeting its peak demand requirements as an LRE. The SPP determines seasonal capacity needs based on projected summer and winter peaks, which call for a February deadline to submit data in its workbook for the upcoming summer season and an August deadline to provide updated workbooks for the winter season.
- **Event duration and dispatch.** Differing RTO requirements for event durations lead Ameren Missouri and Evergy to structure their programs differently to meet their respective obligations and maximize value.
  - Ameren Missouri, by fully registering its DR as an LMR, is bound by market rules for grid reliability, including that DR events must be a minimum of four hours and shorter notification windows (between 30 minutes and six hours). While Ameren can designate specific availability windows during accreditation process, the resource's accreditation value is increasingly tied to its availability outside of peak periods. Additionally, MISO requires utilities to test their LMRs, and the test results must demonstrate demand-reduction capability for at least one hour.

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[38] Forrester, Sydney P., et al. *Regulation of Third-Party Aggregation in the MISO and SPP Footprints* (Lawrence Berkeley National Laboratory, 2023). Accessed here.

[39] Missouri Public Service Commission. *Order Temporarily Prohibiting the Operation of Aggregators of Retail Customers.* (2010) Accessed here.

[40] Missouri Public Service Commission. *Order Partially Modifying the Commission's 2010 Order Regarding ARCs* (2023). Accessed here.

- By using DR primarily as a load-modifying strategy, Evergy has more flexibility to tailor events to its specific needs, such as summer and winter peak load forecasts and system constraints. Event dispatches are tailored to increase effectiveness in reducing the actual peak to avoid a capacity shortfall penalty or to support its own economic dispatch decisions.

- **Data and Measurement and Verification (M&V) needs.** The requirements for data and M&V methodologies differ substantially between MISO and SPP, driven by the different ways they integrate DR for resource adequacy (RA) and market participation.
  - MISO generally requires hourly meter data for the entire planning period. For resources with a response time of less than an hour, MISO requires five-minute interval meter data. MISO LMRs are accredited based on their historical performance and real-time availability, meaning the amount of capacity credit is tied directly to resource performance during test or actual events. MISO defines a clear set of permitted baseline methodologies in its Business Practice Manual[41] and requires adherence to strict documentation requirements.
  - SPP's RA model allows Evergy greater flexibility with M&V approaches. The primary data needed for SPP RA compliance is proof that the DR programs effectively reduced the utility's net peak demand forecast. This requires collecting data sufficient to demonstrate sustained load reduction during actual peak events. Notably, proposed revisions may change these requirements moving forward. Appendix E contains additional detail.
- **Program targeting and incentives.** Varying program priorities can significantly influence which customers utilities target and the structure of their financial incentives. Within a MISO seasonal LMR framework, the focus can be on customers capable of delivering longer load reductions across seasons to maximize capability during emergency dispatch. SPP's flexibility may allow for a broader range of targeted customers.

Allowing ARCs to aggregate resources into wholesale markets presents several considerations:

- **ARC competition with utility programs.** Given the double-counting rules, under which load reductions from a single customer cannot count toward both capacity and energy, ARCs ostensibly compete with utilities for enrollment in the same pool of eligible customers who are either currently enrolled or might otherwise enroll in MEEIA DR programs. For Evergy, such competition may increase its RA needs because ARC DR is effectively an alternative form of supply for the SPP market.[42] For Ameren Missouri, it may mean that capacity resources capable of delivering emergency relief for a minimum of four hours will be routed to shorter-duration performance in energy markets, thus rendering that capacity lost.
- **Visibility into operational and infrastructure concerns.** Currently, there are limited requirements related to data sharing between ARCs and utilities. In SPP, for instance, ARCs are not required to provide advance notification to Evergy or to coordinate DR dispatch. Such a lack of visibility may introduce additional volatility into the distribution system and uncertainty into future planning, as wholesale market resources respond to high prices rather than peaking conditions. In the absence of coordination with ARCs, customers who exit an aggregator program are often unable to be readily re-engaged by the utility, resulting in lost opportunities to recover their DR capacity into the utility's portfolio. Finally, the presence of ARCs and utility programs may impact the C&I customer journey and experience with DR.

In Missouri, consideration of a statewide approach to DR must strike a careful balance: capturing the efficiencies of scale while preserving the essential flexibility required by Missouri's unique utility landscape. A statewide delivery

[41] Notably, MISO permits the use of custom baselines, however, the Transmission provider must approve the documentation with the specific methodology before such methodology can be utilized to construct the baseline. MISO sets specific rules for the documentation that must be provided to support the use of custom baseline methodology. Source: MISO FERC Electric Tariff Attachments. Attachment TT – Measurement and Verification (M and V) Criteria 42.0.0.

[42] Evergy. *Evergy Missouri West Integrated Resource Plan 2023 Annual Update* (2023). Accessed [here]().

framework offers a meaningful opportunity to achieve administrative efficiencies, particularly by leveraging distributed energy resource management system (DERMS) providers to streamline data sharing and customer engagement with ARCs at the statewide level. When executed correctly, theoretically such a model allows a single technical platform to administer programs across multiple territories, providing the "administrative upside" of a unified portal while still tailoring event dispatch to the specific technical needs and system conditions of each utility.

However, this coordination should function as a flexible technical enabler rather than a rigid mandate for program uniformity. Given the fundamental differences between the MISO and SPP footprints, specifically regarding market products, accreditation structures, and evolving rules, the effectiveness of DR depends on its ability to remain highly customized. Imposing a "one-size-fits-all" model risks creating an artificial consistency that ignores critical implementation asymmetries. For instance, a commercial customer in Ameren Missouri committing to MISO emergency events may face entirely different performance requirements and realize different value streams than an Evergy customer in SPP; these differences will need to be reflected in their respective incentive structures to ensure fairness and market alignment.

Furthermore, a flexible approach allows for the recognition of cost asymmetries inherent in administering diverse DR programs, where one utility's market integration may be significantly more complex than another's. By focusing on a coordinated framework rather than a locked-in statewide model, Missouri can capture the benefits of technological scale and streamlined ARC participation without compromising the agility needed to adapt to shifting RTO rules and the distinct operational priorities of each utility system.

A statewide DR framework will need to be designed to operate across two distinct RTO environments and evolving market rules. The differences outlined above create several implications for statewide program design and administration:

- Program design will need to remain tailored to divergent RTO market structures:
  - Customer recruitment strategies, event dispatch rules, notification windows, and event durations must be customizable across Ameren Missouri and Evergy territories to meet MISO and SPP requirements, respectively.
  - A statewide DERMS or program administrator will need the capability to differentiate logic, controls, baselines, dispatch timing, and program parameters based on each utility's RTO footprint and RA construct.
  - Program rules such as seasonal participation windows, availability requirements, reporting, and telemetry specifications will need to remain custom to avoid misalignment with RTO obligations or introducing undue burden.
- Continued customization will be necessary to incorporate utility-specific system needs. Even beyond RTO differences, Ameren Missouri and Evergy may face different local system constraints, distribution-level operating conditions, and seasonal risk profiles. As such, each utility will need to adapt its DR program dispatches to evolving needs.
- Ongoing adaptation will be needed as market rules evolve. RTO market rules have evolved considerably over the last several years and will likely continue to change. Some examples of evolution include new resource adequacy accreditation rules in the SPP and MISO's recent system-wide reform of the DR and LMR accreditation process, as well as a ban on market participants registering as an LMR or an emergency DR resource.[43] These developments imply that statewide programs need to maintain flexibility, be able to make adjustments, and have an implementation model that can accommodate RTO rulemaking and tariff changes.

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[43] Midcontinent Independent System Operator (MISO), Inc. *Elimination of Dual Registration for Emergency Demand Response (EDR) Resources MSC-2025-3* (2025). Accessed here.

- Coordination with ARCs will need to be considered within the context of the statewide program design. Addressing ARC interactions to plan for the loss of DR program potential, minimize operational uncertainty, increase visibility, and improve the customer DR experience while minimizing confusion. Effective coordination will benefit both utility-specific DR and the broader statewide program framework.
- Statewide administration will need to allow for likely differentiated incentives and targeting. Given the differing market structures of MISO and SPP, and each utility's unique system conditions, requirements for DR dispatch, including frequency, duration, notification windows, and event timing, will necessarily vary across territories. Market-specific DR monetization pathways also differ meaningfully between the two RTOs. As a result, customer engagement strategies, incentive levels, and eligibility criteria will likely need to be tailored to reflect the distinct operational needs and monetization opportunities in each region, while still maintaining overall statewide program coherence.

4. PROGRAM COST SAVINGS

Missouri DSM stakeholders are interested in the extent to which administrative model structures have delivered cost savings from the shift away from utility-administered programs toward hybrid or statewide model structures. Specifically, the study team assessed potential cost savings on the following dimensions through in-depth interviews with DSM experts across comparison states and a review of available secondary data:

- Shifts in core utility obligations and reduction in redundant positions across utilities through a centralized planning and administering organization
- Bulk purchasing opportunities that arise through a larger, statewide implementation model
- Changes in administrative cost guidance that occur in the shift from utility-administered to statewide models

The study team aggregated the primary and secondary data across the comparison states and assessed the degree to which the shift in administrative model led to cost savings (positive), an increase in costs (negative), or had no material impact on DSM program costs (Table 7). The study team was unable to find reliable administrative cost data for DSM portfolios before and after transitioning to different administrative models in the comparison states. Many of these states, especially those with fully statewide administration, changed their models over 20 years ago. Due to the evolution of DSM programs during that time, comparing costs before and after the transition would not have provided a fair comparison.

Table 7. Comparison State Rubric—Cost Savings

Policy Driver	Description	Positive	Neutral	Negative
Cost Savings	Opportunities to find efficiencies and cost savings moving to a statewide or hybrid model	Has resulted in cost savings compared with utility-administered programs	Has had no material impact on costs when compared to a utility-administered program model	Has resulted in increased costs when compared to a utility-driven model

Based on the qualitative data collected by the study team, overall, five of the six comparison states with active statewide or hybrid administrative models did not experience material near-term cost savings as a result of shifting their administrative model (Table 8). Vermont is a somewhat unique case among the comparison states, as it is served by many smaller utilities operating across numerous rural service territories. As such, individual utilities that have opted into Efficiency Vermont likely spend less to operate their DSM programs collectively than they would if they were operating them individually. Several experts from comparison states with fully statewide administrative models noted that there would likely be upfront costs associated with shifting models (e.g., establishing a nonprofit DSM administrator). While those experts also indicated that statewide administration may result in long-term cost efficiencies, the study team was unable to verify those efficiencies due to the length of time those models had been in operation and the changing nature of DSM programs over that period.

Table 8. Cost Savings Summary

State	Statewide Implementation Model Type	Cost Savings
Oregon	Statewide	Neutral
Vermont		Positive
Wisconsin		Neutral
Maryland	Hybrid	Neutral
Massachusetts		Neutral
New Jersey		Neutral

4.1 ADMINISTRATIVE COSTS

To understand potential changes in program administrative costs, the study team compared costs in the focal states before and after their statewide implementation where those data were available, examined costs for statewide programs over time, and contrasted costs for statewide implementation with those of utility-run DSM programs.

States in our comparison group took varying approaches to managing administrative costs. In Oregon, administrative costs must not exceed 6.5% of program budgets. Other states seek to manage administrative costs through regulatory oversight. For example, in Vermont, the Public Utilities Commission adopted a set of performance metrics that includes a 5% reduction in administrative costs in the 2024–2026 Triennial Plan.[44] One challenge in comparing levels of administrative costs across states, however, is the inconsistent definition of which costs are categorized as "administrative." Several interviewees acknowledged that it is not always clear what a utility or statewide administrator considers as an administrative cost, and it likely also varies across individual utilities. Furthermore, one interviewee noted, "There is not clear cost allocation to understand what exactly is an administrative cost and another type of cost versus cost for incentives. There is an issue of documentation of administrative costs being saved as a result of the program." Another interviewee was skeptical of whether a utility would be able to demonstrate all their administrative costs, and likely would underestimate them.

> *"Apples to apples is difficult in this case. Utilities are going to say, 'Oh no, my [program] was cheaper, I just had five employees and no other costs.' They don't account for their accounting department, legal department, [and] all of the other costs that are administrative and part of the general utility program."*

The three states with statewide implementation all began their statewide models at least two decades ago. The study team was unable to find sufficient publicly available documentation of administrative costs *before* the statewide program began to complete quantitative comparisons of administrative costs pre- and post-statewide administration. Nonetheless, interviewees suggested that statewide programs may experience short-term increases in administrative costs but long-term cost savings.

Experts in comparison states highlighted the value and potential cost savings of fewer administrative functions under statewide administration. They hypothesized that having a single "overhead" entity would reduce administrative tasks, both those associated with administering a DSM program and those required by the public utility regulatory body.

[44] Vermont Energy Investment Corporation. *2025 Update to the Triennial Plan 2024–2026*. Accessed here.

"I think there's definitely a chance for cost savings because there is overhead in stakeholder outreach, regulatory filings, [and] coordinating implementers, contractors, and service providers. And if you create a statewide platform where everyone can participate in the programs, that's going to generally increase your pool of savings, which will then create more system benefits."

When looking at each statewide program's costs over time, there is mixed evidence that statewide DSM programs can keep administrative costs low. Energy Trust of Oregon (Energy Trust) has consistently spent below the administrative cost cap of 6.5% of its annual operating revenue. Their administrative costs increased from $1.6 million to $10.1 million between 2002 and 2017, while annual revenues increased from $30.6 million to $194.2 million. As a result, the administrative cost percentage decreased from 5.23% to 5.20%, while the margin between revenue and administrative costs increased by a factor of 21.[45] A 2024 Energy Trust management review report compares administrative costs between several other DSM-administering organizations and finds that Energy Trust's administrative to total cost ratio is lower than that of Vermont Energy Investment Corporation (VEIC), higher than three other comparable organizations, but still far below its expressed threshold.[46] In contrast to Oregon, Efficiency Vermont had above-median spending as a percentage of its revenues compared to peer organizations.[47] Furthermore, a review of Efficiency Vermont's evaluation reports revealed that the program's administrative spending as a percentage of its revenues ranged from 5.14% (2024) to 6.64% (2018) since 2015.[48] Finally, a municipal impact study of Massachusetts's statewide program, Mass Save, criticized utility payouts as a high administrative cost.[49] The study urges the Massachusetts legislature to hold hearings and examine Mass Save's design, budget, and equity outcomes, specifically scrutinizing socioeconomic imbalances in the delivery of benefits to justify its administrative costs.

One way to make such a comparison possible is to study the rate of non-incentive spending as a proxy for administrative costs. The US Energy Information Administration has collected incentive versus non-incentive spending at three-year intervals since 2015 as part of the Annual Electric Power Industry Report.[50] States with statewide administrative models—Oregon, Vermont, and Wisconsin—reported lower or similar average non-incentive spending compared to Missouri utilities in 2018 and 2021. In the remaining years, however, non-incentive spending was higher for statewide models (Table 9). On average, the largest electric utilities in Missouri reported lower non-incentive spending compared to those in Oregon, Vermont, and Wisconsin. Liberty Utilities is smaller, compared to other utilities included in this table, and has a higher share of rural customers. Lower non-incentive spending could reflect a more limited energy efficiency portfolio.

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45 Secretary of State Oregon Audits Division. *Public Utilities Commission: Energy Trust Administrative Costs are Generally Reasonable, but the PUC Can Improve Oversight of These Costs* (2018). Accessed here.

46 1961 Consulting, LLC. Energy Trust of Oregon *2024 Management Review Final Report* (2024). Accessed here.

47 This data is sourced from ACEEE's internal utility program database, which is unpublished.

48 Efficiency Vermont. *Efficiency Vermont Annual Report 2015* (2016). Accessed here; Efficiency Vermont. (2019). Efficiency Vermont 2018 Annual Report (2019). Accessed here; Efficiency Vermont. (2023). Efficiency Vermont Annual Report 2021. Accessed here; Efficiency Vermont. (2025). Efficiency Vermont Savings Claim Summary 2024. Accessed here.

49 Division of Local Mandates. *Who Pays and Who Gains? Analyzing Contributors and Beneficiaries of the Mass Save Program - Municipal Impact Study* (2025). Accessed here.

50 US Energy Information Administration. *Annual Electric Power Industry Report, Form EIA-861 detailed data files* (2025). Accessed here.

Table 9. Summary of Non-Incentive Spending in Statewide Programs, Compared to Missouri's Large Electric Utilities

Model Type	DSM Program Administrator	State	Non-incentive Spending % 2015	2018	2021	2024	Average across Years
Statewide Models	Energy Trust of Oregon	OR	45%	48%	45%	48%	**47%**
	Vermont Energy Investment Corporation	VT	66%	45%	31%	36%	**44.5%**
	Focus on Energy	WI	36%	40%	39%	40%	**39%**
	Average of 3 Statewide States		**49%**	**44%**	**38%**	**47%**	**45%**
Large Missouri Electric Utilities	Ameren Missouri	MO	39%	42%	46%	36%	**41%**
	Evergy Metro (KCP&L)	MO	28%	55%	56%	34%	**45%**
	Evergy Missouri West (KCP&L Greater Missouri Operations Co.)	MO	31%	60%	53%	35%	**44%**
	Liberty Utilities	MO	13%	14%	20%	38%	**21%**
	Weighted Average of Missouri Utilities[51]	**N/A**	**28%**	**43%**	**47%**	**35%**	**40%**

Data Source: EIA Form 861, showing energy efficiency program spending only.

4.2 THE COST OF ENERGY EFFICIENCY

The cost of energy efficiency does not differ substantially by administrative model type. We analyzed the cost-effectiveness of energy efficiency programs to determine the influence of each administrative model. First, we determined the cost ($/year) to run utility energy efficiency programs through data provided in utilities' annual demand-side management reports. The program cost data are collected from 52 of the largest US utilities (by retail sales), which serve approximately 79 million residential customers.[52] We then compared reported lifetime savings estimates (MWh) from measures installed in program years with the full cost of running those programs.[53]

Figure 4 shows the cost comparison of EE programs in the focal states under different administrative models, compared to an average across the 52 major utilities for which data were collected.[54] Utility-administered program costs are represented by whisker plots. We calculated energy saving costs ($/MWh) by dividing energy efficiency program costs ($) in the indicated years by their projected lifetime energy savings (MWh). As a proxy for Missouri, we included Ameren Missouri's program costs-to-savings ratios as triangles in the figure. Across all categories of efficiency program, program costs were comparable or lower than the cost of supply side resources.

Ameren Missouri's costs per savings ($/MWh) in 2015, 2018, 2021, and 2024 were $11.75, $18.95, $15.41, and $39.09, respectively—falling below average in cost for the first three years of measurements, but well above average in 2024. In 2024, of the focal states studied, only New Jersey and Vermont reported higher costs per MWh of lifetime savings. Efficiency program effectiveness is known to depend on a variety of factors, including overall efficiency investment, state policies, the regulatory environment, the quality of the existing building stock, workforce availability, and program maturity. The limited number of states with statewide, hybrid, and non-statewide models makes isolating

51 Average across Missouri utilities is weighted by customer number in 2024.

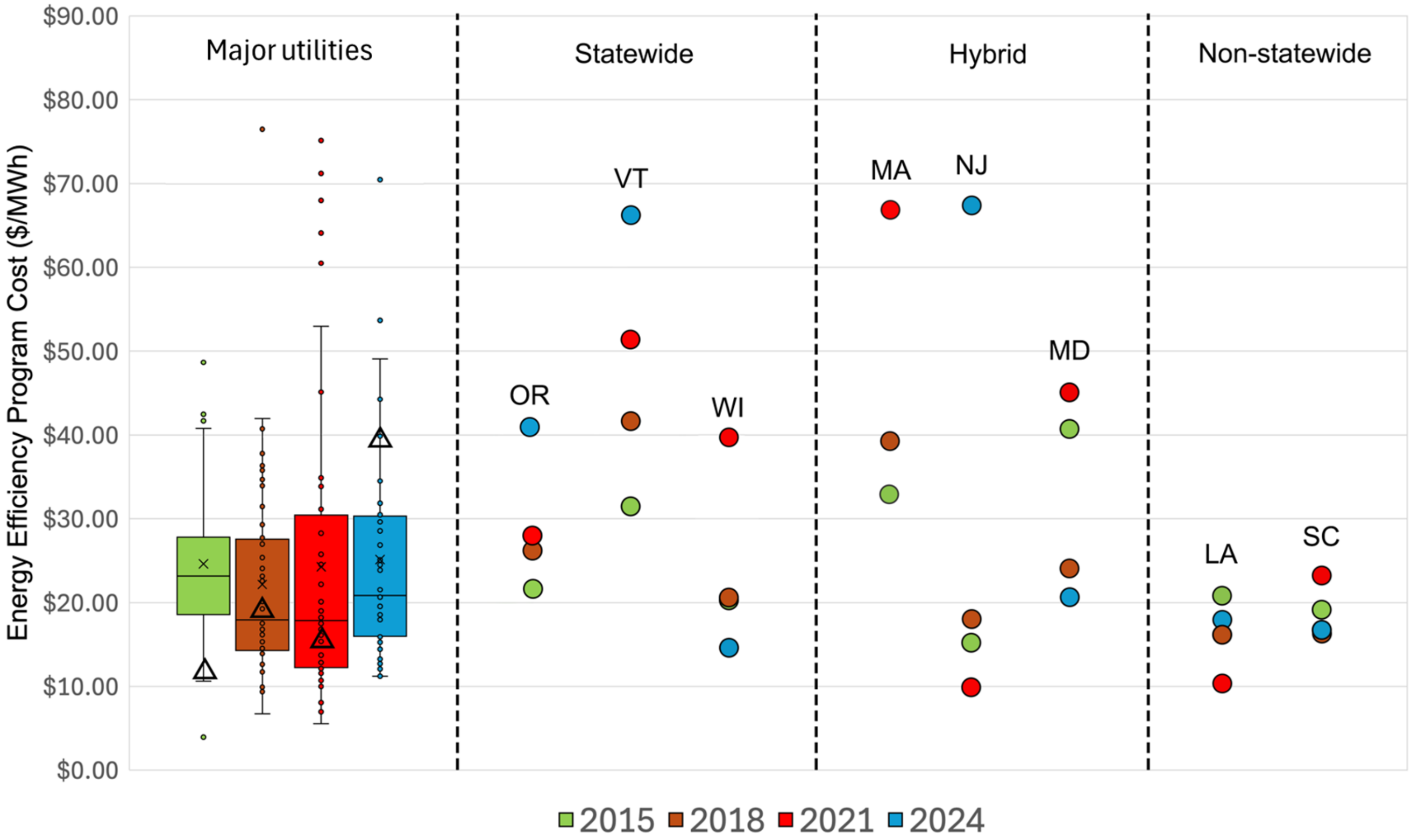
52 This represents about 60% of all U.S. households.

53 For utilities that only report annual incremental savings, we derived lifetime savings by applying an average expected useful lifetime (EUL) of 12.45 years, which is the average EUL of the utilities that do report those data. Lifetime savings are measured net at the generator. We use average net-to-gross and line loss ratios of 0.895 and 0.0635 when utilities do not explicitly report them. These are also averages of those that do report.

54 This data is sourced from ACEEE's internal utility program database, which is unpublished.

specific factors challenging. Consequently, there is insufficient evidence that the type of administrative model has an appreciable impact on energy efficiency program cost-effectiveness.

Figure 4. Cost Comparison: Energy Efficiency Programs by Administrative Model to Major Utilities' Average Cost



4.3 BULK PURCHASING

Based on our review of comparison states, bulk purchasing does not appear to be an opportunity for cost savings from statewide models. DSM experts and implementers did not report bulk purchasing as a common practice. More commonly, DSM programs are designed so that equipment is purchased by individual contractors or trade allies, or individual customers who then receive a rebate through their participation. Furthermore, DSM experts highlighted several challenges associated with purchasing equipment in bulk (e.g., maintaining inventory, warehousing). Relatedly, some statewide program administrators have focused on improving the supply chain for the most efficient equipment. In Vermont, program administrators have focused on engaging supply chain actors and funneling high-efficiency equipment by heavily incentivizing those products, while not incentivizing lower-efficiency products at all. This enables the program to circumvent any challenges associated with bulk purchasing. Efficiency Vermont has briefly explored the possibility of holding equipment in a warehouse in the past, but ultimately decided it would be too challenging to produce material cost savings.

“We’ve gotten around [bulk purchasing] by working directly with the suppliers. We don’t let suppliers bring in the non-efficient heat pumps… we only give midstream incentives for the high-efficiency, cold climate ready heat pumps, and, as a result, they can basically bring these things in on trucks rather than us individually shipping orders. That does help. It really does help. We played around with this idea of, ‘could you buy a warehouse full of one thing and both have it be available in real time,’ and that is a tricky issue. We have not fully run the course on that opportunity yet.”

One DSM implementer was unaware of a state implementer that had engaged in bulk buying to reduce costs or market products to consumers, and questioned whether this approach would actually save money. Usually, statewide programs utilize existing workforce and inventory within a market, such as partnerships with manufacturers like Google for smart thermostats. They also noted that bulk-purchasing equipment at the state level would mean the program is responsible for installation and inventory management, which could increase costs compared to using existing market resources.

“I’m not aware of anywhere that a state or an implementer has engaged in bulk buying and warehousing measures to then try and market them out to their customers. I think [economies of scale from bulk buying] is a general misconception, because the assumption that a statewide program is going to engage in bulk buying would then assume that that state program is going to be the one doing, for example, the direct install, which would then mean that the state program would have to invest in warehousing. There’s a lot of investment that you have to make when you’re about to start holding inventory that you’re unsure about what you’re doing with. The way that most programs have found success is in building the markets in which these programs operate.”

5. GOVERNANCE AND OVERSIGHT

The governance and oversight structure of DSM portfolios varies across the focal states. We define “successful” governance and oversight models as those that (1) foster collaboration and provide consistent guidance while maintaining accountability across key stakeholders, and (2) reduce complexity and administrative burden for participants.

Key aspects of governance and oversight models that influence program success and strategy include:

- **Statewide implementation model type and core features**, including a statewide or hybrid structure, core facets of that model type, the relationship between implementation model and state energy policy goals, and how utility reporting and evaluation requirements shift based on model structure.
- **Key legislative bills** passed or introduced in relation to DSM, including lead time, processes, and challenges implementing the new DSM program model after legislation passage.
- **Regulatory structure decision-making process, and stakeholder working groups**, including the role of the public utility regulatory body, such as its expectations and authority granted to the public service commission, along with rules, regulations, and other requirements, as well as the existence of and engagement with stakeholder working groups.
- **Program and resource planning structure**, including integrated resource planning and program planning cycles, timelines, minimum approval requirements, minimum required programs, and relationships with broader utility planning.
- **Utility participation and role** within statewide or hybrid DSM models, including the varying roles for electric, gas, municipal, and co-operative utilities, and strategy for utility cost recovery and performance incentives.
- **Relationship between energy efficiency and demand response programs** in the context of the governance model.

Through a combination of interviews with key stakeholders in focal states and secondary data collection, we assessed the degree to which the shift in a state’s administrative model had a positive, negative, or neutral impact on the two components of governance and oversight (fostering collaboration and reducing complexity) shown in Table 10:

Table 10. Summary of Governance and Oversight Rubric Scoring Metrics

Policy Driver	Description	Positive	Neutral	Negative
Governance and Oversight: Fostering Collaboration	Maintaining appropriate governance while reducing complexity and adhering to oversight structures	Has fostered positive collaboration across energy efficiency stakeholders within the state	Has had no impact on the ability of energy efficiency stakeholders to collaborate	Has decreased collaboration across energy efficiency stakeholders
Governance and Oversight: Reducing Complexity		Has reduced complexity in terms of governance and oversight	Has had no material impact on reducing complexity in terms of governance and oversight	Has increased complexity in terms of governance and oversight

While changing the administrative model can help reduce complexity and improve collaboration, these outcomes were primarily driven by supporting components, such as mechanisms that promoted portfolio uniformity, rather than by the model itself. DSM experts reported that statewide planning and evaluation tools often supported more collaborative relationships, and having clear protocols and standards also helped standardize processes. Further, establishing a statewide model can reduce complexity for customers, trade allies, and stakeholders navigating planning and evaluation processes.

Below, we summarize the overarching ratings for each focal state (Table 11) and offer more details on what we learned from comparative states, highlighting effective components of existing statewide models that could be potentially be integrated, in some form, into Missouri's current or future DSM framework. While model structure had a neutral impact on collaborative processes and model complexity in many states, based on interviews and secondary data collection, we identified Vermont, Massachusetts, and Wisconsin as exemplary states where aspects of the statewide model did positively support collaboration and reduce process complexity. For example, Vermont has successfully coordinated across many small utilities, facilitated by a statewide model with well-established centralized planning processes and clear expectations for all parties. Similarly, Massachusetts has established a clear set of goals and processes through the Energy Efficiency Advisory Council (EEAC), which provides a framework for program administrators across the state to collaborate with other DSM stakeholders. Like Vermont, Wisconsin's Focus on Energy serves nearly all of the state's electric customers, which improves the experience for customers, trade allies, and DSM stakeholders. Additional state-level case studies are also available in Appendix A and the comprehensive research and analysis framework is available in Appendix B.

Table 11. Governance and Oversight Rubric Scores by State

State	Statewide Implementation Model Type	Governance and Oversight: Fostering Collaboration	Governance and Oversight: Reducing Complexity
Oregon	Statewide	Neutral	Neutral
Vermont		Positive	Positive
Wisconsin		Positive	Positive
Maryland	Hybrid	Neutral	Neutral
Massachusetts		Positive	Neutral
New Jersey		Neutral	Neutral

5.1 ESTABLISHING A NEW ADMINISTRATIVE MODEL

Broad state energy policy goals influence the structure and priorities of state DSM programs. Changes in state administrative models flowed from new policy directives (Table 12). For example, both Oregon and Vermont switched to a statewide administrative model as part of electricity market deregulation efforts. South Carolina and Maryland revised their administrative models to address concerns about energy rate increases. Massachusetts and New Jersey modified their administrative structures to a hybrid model to enhance energy savings and establish state climate and efficiency goals. These broader policy drivers substantially impacted the content of the legislation used to shift administrative models.

States with policy concerns focused on energy rates. Administrative costs of DSM programming were more likely to explicitly set program budgets (Wisconsin), to prioritize the collection of cost-effectiveness and administrative cost data across administrative model approaches (South Carolina), or to explicitly mandate an alternative administrator if there were concerns around the performance of the current administrator (Wisconsin and New Jersey).

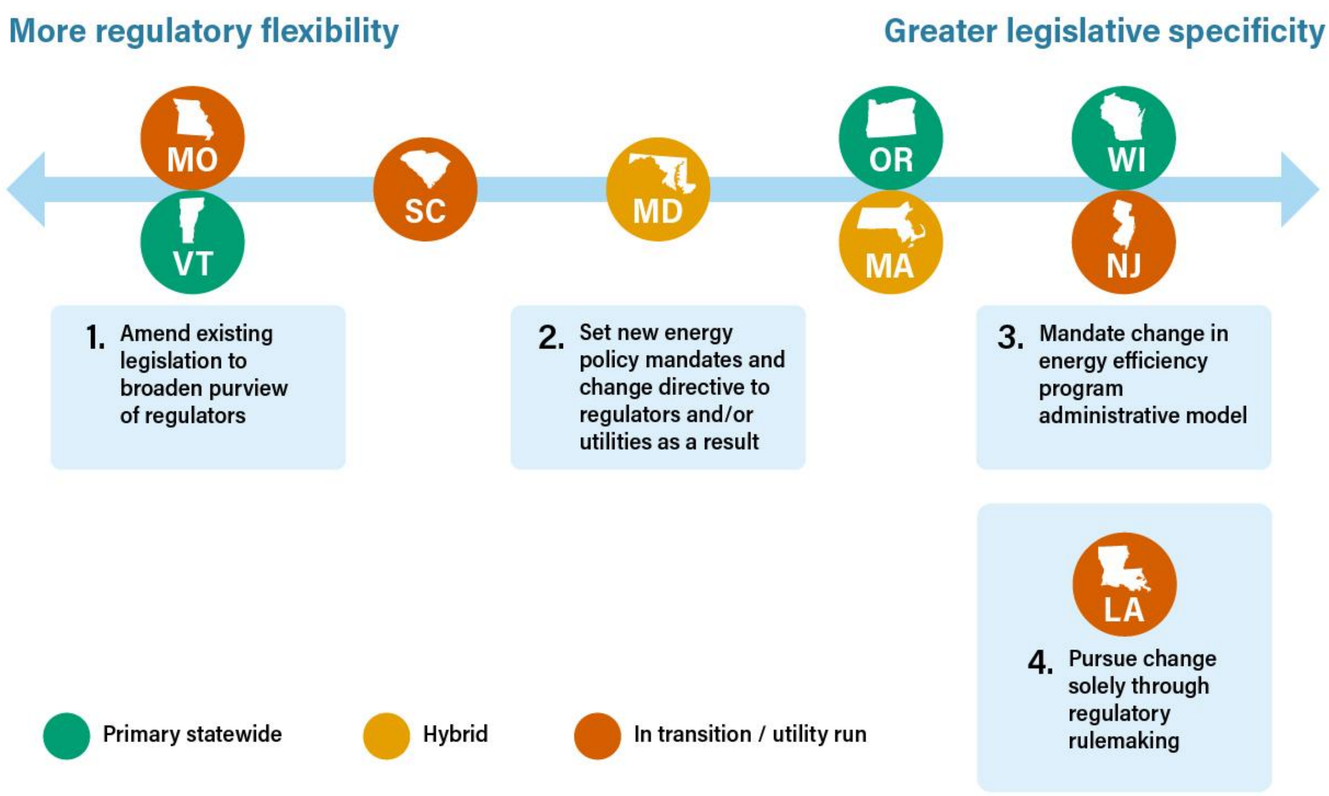
Table 12. Summary of High-Level Policy Drivers of a Statewide Administrative Shift

State	Statewide Implementation Model Type	Year Legislative Action Occurred	Broader Policy Drivers of Administrative Change
Oregon	Statewide	1999	Deregulation of electricity markets
Vermont		1999	Deregulation of electricity markets (although VT did not ultimately deregulate)
Wisconsin		2005	Prevent energy efficiency funds from being moved to the state general fund
Maryland	Hybrid	2005	Concerns about rate increases
Massachusetts		2008	Enhance coordination between utilities, braid state and utility funds, and achieve greater statewide savings
New Jersey		2018	Increase statewide energy savings and peak demand, and enhance clean energy procurement
Louisiana	Utility-Administered	N/A	Concerns with utility savings performance, desire to expand to non-IOU customers, and aim to reduce administrative complexity and cost
South Carolina		2025	Manage demand growth and lower bills by meeting with cost-effective resources, and address the underperformance of state IOUs

5.1.1 LEGISLATIVE STRATEGY

State policy and administrative model structure legislation set the stage for administrative shifts in all but one of the focal states. The legislative underpinnings of a statewide energy efficiency implementation model establish requirements for collaboration among multiple stakeholders across resource planning, budgeting, reporting, and evaluation. The clear demarcation, through legislation, of which stakeholders must be included in decision-making can support more consistent collaborative strategies. The specificity and strength of legislation used to set the administrative structure and normative relations between DSM stakeholders vary across states and across program model types (Figure 5).

Figure 5. Conceptual Model in Relative Strength of Legislative Directives across Focal States



Vermont's legislative approach fell on the most regulatory flexibility end of the scale (position 1 in Figure 5). The state's legislative language authorized the regulatory board to consider appointing an alternative administrative entity to run energy efficiency programs, but did not dictate which course they would take. The representative interviewed from Vermont explained the specific legislative provision that enables this flexibility.

"The obligation is still on the utilities and 'Title 30 Section 209' enables the Commission to then appoint a statewide entity to serve in their place. The Commission is granted the flexibility to see if specific utilities have the capacity to continue running its own programs."

Wisconsin and New Jersey took legislative approaches with the greatest legislative specificity (position 3 in Figure 5). Wisconsin required its commission to select a third-party administrator and explicitly set funding levels for each utility. New Jersey required the Board of Public Utilities to establish utility-administered DSM programs and move away from a previously state-agency-administered program. Greater legislative specificity has been employed to address known issues with current administrative models or to ensure that administrators are better equipped to handle a portion of a portfolio that oversees those programs. The performance of the current administrator is usually the primary concern of a specific legislative mandate regarding the administrator of DSM programs. While this approach creates a direct fix to a known program delivery issue, it may be disruptive to current operating environments.

South Carolina, Maryland, Oregon, and Massachusetts fell in the middle between regulatory flexibility and direct legislative mandate (position 2 in Figure 5). This approach balanced regulatory flexibility with legislative specificity, often beginning with the establishment of top-down statewide goals or clarifying requirements for utilities and regulators. This "middle" strategy was usually employed when there was a clear policy driver for enhancing DSM programming, but the current administrative structure was not perceived as the primary barrier to success. For example, Maryland shifted to a centralized statewide brand (EmPOWER) with utility-administered programs to more effectively plan for and achieve ambitious new statewide energy savings and DR goals set by the legislature. By setting state-level standards for program performance and establishing consistent standards for evaluating and comparing plan outcomes across utilities, this legislative strategy could provide flexibility in determining the optimal administrative model to achieve desired results. This flexibility could lead to a more complex program structure if utilities cannot meet new standards or regulators fail to enforce them properly, and may necessitate future modifications to the program structure or legislative changes. For instance, Massachusetts established a statewide brand with utility-administered programs, much like Maryland, but has recently begun to consider whether a fully statewide administrator might better achieve programmatic equity and savings goals.

5.1.2 IMPLEMENTATION TIMELINES

All three of the states we explored with statewide models shared a similar implementation timeline, from the passage of legislation to the implementation of the statewide program. Roughly, each state followed a two-year implementation timeframe:

- In Oregon, legislation was passed in 1999, a statewide administrator was selected in 2000, and operations of the statewide model began in 2001.
- In Vermont, legislation was passed in 1999. A statewide model was operational by 2000.
- In Wisconsin, legislation was passed in 2006 to move to a third-party statewide administrator, and an administrator was selected in 2007, with the statewide model in operation by 2008. This update was made to legislation passed in 1999, which established the public benefit fund and resulted in a DSM portfolio being managed by a state agency.

In Massachusetts and Maryland, transitions to hybrid, utility-administered, statewide-branded programs were swift—in both cases, statewide program branding and planning were initiated the same year the legislation passed. Other states had more complex timelines. Stakeholders in Louisiana spent roughly 10 years developing a statewide model plan through regulatory dockets, only to have it canceled by commissioners unexpectedly earlier this year. In South Carolina, legislation was passed in 2025 to explore a transition to a statewide model; however, to date, the regulatory commission has made no further progress on this process.

In New Jersey, the administrative model for DSM programs underwent significant changes between 2001 and 2025. In 2001, legislation designated a state agency as the statewide administrator. In 2007, the state shifted to a third-party for-profit implementer, while the New Jersey Board of Public Utilities (BPU) continued to manage and oversee most DSM programs. Then, in 2018, legislation was passed to return the administration of the DSM program to the utilities.

5.2 FOSTERING COLLABORATION

Statewide savings, planning, or investment targets can promote more consistent and transparent regulatory review processes. Most of the focal states had centralized legislative targets for savings or investment, typically expressed as energy efficiency resource standards (i.e., the targeted share of sales to be reduced by DSM programs), that individual utilities aimed to achieve through their plans (Table 13).

Table 13. Energy Efficiency Resource Standard (EERS) Targets

State	Statewide Implementation Model Type	EERS Electric Standard	EERS Gas Standard
Oregon	Statewide	1.1% (2021)	0.5% (2021)
Vermont		2.4% (2023)	1% (2023)
Wisconsin		0.7% (2026)	0.3% (2026)
Maryland	Hybrid	2.7% (2021)	1.25% (2021)
Massachusetts		2.7% (2021)	1.25% (2021)
New Jersey		2% (2025)	0.75% (2025)
Louisiana	Utility-Administered	N/A	N/A
South Carolina		N/A	N/A

In states without these investment targets, interviewees reported high variability in utility ambition levels, and it was sometimes unclear whether regulators applied a consistent assessment standard across individual utility plans. For example, in South Carolina, a lack of consistent program planning cycles and goals led to significantly different levels of DSM investment across two major investor-owned utilities.

Administration by state agencies introduced challenges in some cases, as it can be difficult for regulatory agencies, typically charged with oversight of DSM programs, to hold another state agency accountable. For example, Maryland's low-income energy efficiency program is administered by the Maryland Department of Housing and Community Development (DHCD). While the low-income program is subject to state-level targets, the DHCD has consistently struggled to meet them.

"Not only have they [DHCD] not met their target savings for the low-income program, but there is very little accountability since it's a state agency. They're getting like [around] 20% of the savings targets. The utilities would rather run the programs themselves, and they would run them better."

Multiple interviewees commented on shifts away from state agency–run programs, either by handing DSM programming back to utilities or to a third party. In New Jersey and Wisconsin, the primary reason interviewees gave for these changes was that programs run by state agencies were subject to "raids" on their budgets by the legislature, wherein the legislature "borrows" money allocated to energy efficiency and diverts it elsewhere in the state budget. In New Jersey, "legislative raids" began during the Great Recession and continued frequently thereafter, destabilizing the statewide DSM programs and undermining support for the BPU.

"You can imagine the budget during the Great Recession. People are looking, 'Where are pots of money? Oh, there's this $50 million, $100 million.' So, the tide changes in regards to the BPU running the program. If you know anything about state budgets, you can change any legislative amendment with a budget amendment. The state took $100 [million], $150 million. We would close programs, [and] contractors got upset about setting up programs, and then the funding went away. So, the tide sort of changed to keep [the program] with the utilities."

Stakeholder advisory groups, when designed appropriately, are one mechanism for fostering collaboration among DSM decision makers. The majority of the comparison states included a stakeholder advisory group as part of the planning and approval process. Some states mandate the participation and membership of these advisory groups as part of the legislatively established statewide model, like Massachusetts. In Oregon, three advisory groups operate, aligned with the state's policy priorities around energy conservation, renewable energy, and diversity, equity, and inclusion. In New Jersey, the stakeholder working group focuses on EM&V processes for energy efficiency and demand reduction.

While these stakeholder groups can be helpful, they can also add complexity and increase the burden on regulators to manage them, in addition to their existing oversight responsibilities. In Louisiana, for example, the stakeholder working group initially focused on strategies for keeping administrative costs low. While the working group has been collegial, a lack of clarity about its governance and decision-making structures has made collaboration and obtaining utility buy-in difficult.

In Massachusetts, working group members are reimbursed for their time through ratepayer funds. In contrast to the example in Louisiana, DSM experts noted that such stakeholder groups are successful when there is a clear structure and a set of group goals, which helps keep the group closely involved in the planning and program design process. Experts emphasized the importance of a clear governing structure, dedicated facilitators who do not hold decision-making roles, and empowering the group to exercise authority.

"Having a governance structure goes a long way of just empowering that body to be authoritative. It depends on who's leading it… who's participating, who's got the voting authority. And if Missouri doesn't have one, I would strongly advise them to, like in New York and Massachusetts."

Another way to boost collaboration is to streamline and simplify coordination across complementary state and federal programs for customers. We found examples of this in several of the focal states. Wisconsin's Focus on Energy is also the administrator for the federally funded Home Efficiency Rebate (HOME) and Home Electrification and Appliance Rebate (HEAR) programs. Further, Wisconsin was one of the first states in the country to successfully launch both rebate programs.[55] The Energy Trust of Oregon operates a community partner funding network that simplifies access to efficiency funds for small community organizations by leveraging federal, state, and utility program dollars behind the scenes, thereby reducing the reporting burden for these organizations.[56] In Maryland, only the low-income efficiency programs have a single statewide administrator, the Maryland DHCD. This is in part because DHCD is also the administrator of federal energy assistance funding—specifically, the Weatherization Assistance Program (WAP) and the Low-Income Home Energy Assistance Program (LIHEAP) funds—and decision-makers believed that this central point of contact for all energy assistance could simplify the customer experience.

Finally, shifting the administrative structure does not always necessarily solve previous cultural or political conflicts. Even after states shift to a statewide model, some tensions between stakeholders may persist. For example, the interviewee from Oregon explained that utilities' preference for maintaining a close relationship with their customers can create friction, especially given that a statewide program requires others besides utilities to communicate and coordinate with their customers.

"Tensions among the entities involved in administering a statewide program can hamper the operation of the program overall. In Oregon, relationships among the PUC, Energy Trust, and

55 Office of the Governor, State of Wisconsin. *Gov. Evers, PSC Announce Wisconsin's Launch of Home Electrification and Appliance Rebate Program* (2024). Accessed here.

56 Energy Trust of Oregon. *Affordable Energy Efficiency: Discover Low-Cost Upgrades with Community Partners*. Accessed here.

utilities can sometimes be tense, as utilities like to control the relationship with their customers. This is common in other states."

Data sharing is a critical component of DSM implementation and essential area for collaboration, especially in a hybrid or statewide model where a third-party administrator or state agency relies on access to customer data from utilities. While this may add additional work to implementing a DSM program, experts and implementers emphasized that establishing clear standards and rules for data sharing between utilities and program administrators in advance can help avoid logistical challenges in program planning and delivery. Furthermore, customer data often informs more targeted delivery of DSM offerings, marketing, and improvements for future offerings.

Data-sharing mandates differ across the comparison states with statewide DSM models. Vermont and Oregon have established the most robust data-sharing agreements. Vermont requires that all utilities share their data with the statewide administrator, as established in a Memorandum of Understanding (MOU) filed within the regulatory docket established quickly after a statewide administrative model was proposed legislatively.[57] Through this MOU, the Vermont utilities are required to "maximize coordination among themselves and with the EEU [Energy Efficiency Utility] for planning inputs and implementation capability," including sharing the necessary customer-specific data to conduct program planning, load forecasting, and determine whether programs are meeting distributional equity requirements. Oregon also set up a regulatory docket to establish data-sharing rules between utilities and Energy Trust of Oregon, establishing clear guidelines for the customer data that electric and gas utilities must share with the administrator, the permitted uses of the data by the administrator, and what information must be passed back to the utilities by the administrator.[58] Energy Trust of Oregon is not permitted to use this customer data for general marketing purposes and must obtain formal consent from individual customers to do so. Wisconsin's statewide administrators must receive customer approval to access their data. This can create challenges with customer participation and the implementation of the statewide program. One interviewee explained that data-sharing and data-access challenges can create difficulties for statewide marketing, a critical component of a statewide program.

"In Wisconsin, the utility still owns all the customer data. The program does not have access to data unless a customer signs a release. The Focus program can't do very targeted marketing because they can't see all the data. Vermont gets all the utility data… it creates a lot of economies of scale in terms of program marketing that Focus [on Energy] has never had kind of thing."

5.3 REDUCING COMPLEXITY

While the study team found little evidence that moving to a statewide administrative model alone reduces complexity, several components of statewide and hybrid models in the comparison states do help simplify the participation, planning, and evaluation processes for customers, trade allies, and DSM stakeholders. These include a uniform set of goals, a standard cost-recovery framework, and clear guidelines for incorporating DSM resources into the long-term planning process.

57 Harrington, Cheryl, and Catherine Murray. *Who Should Deliver Ratepayer Funded Energy Efficiency?* (The Regulatory Assistance Project, 2003). Accessed here.

58 Oregon Public Utility Commission. AR 564, Order No. 12 323. *In the Matter of Data Transfer of Customer Information for Public Purposes* (2012). Accessed here.

5.3.1 CUSTOMER AND TRADE ALLY EXPERIENCE

Reducing complexity and improving the customer and trade ally experience are common drivers for states to seek statewide administration. In Louisiana and South Carolina, the primary motivation for exploring a statewide model was to ensure consistent program offerings across all utilities. Louisiana has several IOUs and rural cooperatives, which contribute to inconsistent program offerings and delivery. Similarly, in South Carolina, experts expressed a similar view, explaining that decision-makers sought to explore whether a statewide program could address the dramatic differences in program availability from one utility service territory to the next.

"I think the impetus for this is.... to do a survey of what are the available administrative models. Could it be a way to reduce administrative costs? Would there be benefits to having a more uniform availability of programs across the state so that you wouldn't have your neighbor that just happens to be in another utility service territory have dramatically different program availability than you have?"

Along with Wisconsin, Vermont offers an example of a statewide program that has simplified complexity, particularly for customers and trade allies. While Vermont's DSM stakeholders have established clear guidelines and processes, this is largely because Efficiency Vermont serves most electric utility customers in the state.[59] Customers are likely to have existing relationships with local contractors, so a statewide program ensures a consistent experience and allows trade allies to navigate DSM offerings across utility service territories more seamlessly.

"Ratepayers are buying into Efficiency Vermont, not the utilities. Customers have relationships with their own local vendors, but a statewide program with contractors all over the state can help out customers. Customers can be assured they are going to get the same offer no matter where in the state they are."

Conversely, a hybrid program model may not offer the same level of consistency for customers across utilities as a fully statewide model. While a hybrid program model features a centralized program that utilities can use to develop their individual portfolios, it still leaves gaps in service territories where utilities operate their own programs with different offerings and delivery mechanisms. For example, in Maryland, utilities still administer their market-rate programs under the statewide brand, EmPOWER Maryland; however, this statewide branding does not guarantee that program offerings will be consistent across utilities or offer the same benefits to customers.

Some hybrid states have taken steps to address the burden on trade allies specifically. It can be incredibly time-consuming for trade allies working across multiple utility programs to meet the terms and conditions of each utility, even if the DSM stakeholders have worked collaboratively to create similar program offerings across the different administrators. In New Jersey, the BPU manages a single trade ally network to ensure that it is straightforward for contractors to participate in various utility-administered programs.

[59] There are three Energy Efficiency Utilities (EEUs) in Vermont, though Efficiency Vermont represents the vast majority of electric ratepayers.

> *"It's important when you have different utilities, the program should look the same [and] the application should be the same. So having sort of a coordinated process to make the contractors happy. Keep[ing] the contractors happy is always a good key."*

5.3.2 REDUCING REGULATORY COMPLEXITY

There are also certain aspects of statewide models that can reduce complexity for regulators and other decision-makers involved in integrated resource planning, program planning, and evaluation. Having a central plan and budget to approve on multiyear cycles is a common feature of statewide models; all three statewide model states (Oregon, Wisconsin, Vermont) conduct multiyear planning in four-year cycles. Louisiana's planned statewide model would have had a single budget and plan to be approved by the Public Service Commission, also every four years. Furthermore, some of these states also establish consistent review periods for administrators. For example, Vermont has a 12-year contract with the statewide administrator, signed by the commissioners and up for renewal every six years, with a built-in performance review in the sixth year. This allows the commission to reissue the contract for bid every six years. The interviewee from Vermont explained that this review and bid process acts as a safeguard for the commission, state, and utilities alike.

> *"The overall performance assessment sets a framework for what we will be judged on and whether or not the commission determines that they want to send this out to bid to someone else, or maybe they want to send it back to the utilities if we're not getting the job done anymore."*

INTEGRATED RESOURCE PLANNING

Of the focal states, only Oregon, Louisiana, and South Carolina participate in formal IRP processes, along with Missouri (Table 14).[60] IRPs incorporate market potential studies as inputs to their scenario models, thereby improving the accuracy of demand-side resource inputs in long-term resource planning.[61] States can value DSM resources differently through the IRP process and also align program planning and IRP cycles. Specifically, decision-makers can allow demand-side resources to be a selectable option alongside traditional supply-side resources, enabling the optimization of DSM as part of the long-term planning process (Oregon and Louisiana). Conversely, IRPs can use demand-side resources as scenario sensitivity indicators—assigning specific demand-side reduction levels to evaluate how effectively the plan meets resource needs across scenarios with varying DSM levels, as in South Carolina and Missouri. From a practical standpoint, where DSM is a selectable resource, decision-makers can also choose to align and stagger IRP and DSM planning cycles, allowing DSM stakeholders to develop program plans that address the state's planning needs. Finally, all four states listed in the table below have established a part of the IRP process that involves gathering stakeholder input, thereby enhancing trust and transparency and reducing regulatory risk.[62]

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[60] Antal, Alex, et al. *Putting it All Together: Options for Modernizing Integrated Resource Planning* (Regulatory Assistance Project, 2025). Accessed here.

[61] Biewald, Bruce, et al. *Best Practices in Integrated Resource Planning* (Synapse Energy Economics and Lawrence Berkeley National Laboratory, 2024). Accessed here.

[62] Frick, Natalie Mims. *Training on Integrated Resource Planning for South Carolina Office of Regulatory Staff* (Lawrence Berkeley National Laboratory, 2021). Accessed here.

Table 14. Summary of IRP process alignment with DSM planning in focal states with IRPs

State	Planning Horizon	Frequency	Policy Directives for Procuring Energy Efficiency	Energy Efficiency a Selectable Resource in IRPs?	Stakeholder Engagement Step?
Oregon	20 years	2 years	Utilities are to plan for and pursue all cost-effective, reliable, and feasible energy efficiency and demand-side resources.	Yes, utilities complete regular market potential studies for DSM resources and prioritize selecting all cost-effective DSM in the IRP.	Yes, there is stakeholder engagement, including utility-led informal engagement and formal PUC engagement.[63]
Louisiana	20 years	4 years	Regulated utilities are to pursue cost-effective energy efficiency, and all cost-effective programs can be incorporated into potential studies.	Yes, EE and DR are included as selectable resources.	Yes, the IRP rules require a collaborative stakeholder engagement process as part of IRP development and approval.[64]
South Carolina	15 years	3 years	Regulated utilities are instructed to "invest in all reasonable, prudent, and available energy efficiency and demand-side resources that are cost-effective energy efficient technologies and energy conservation programs in an amount to be determined by the commission."	No, DSM resources are treated as scenario sensitivity modifiers but are not selectable energy resources within portfolios.[65]	Yes, stakeholders can file comments and intervene in IRP dockets.
Missouri	20 years	3 years	Electric corporations are to implement commission-approved programs with the goal of achieving all cost-effective demand-side savings, and the state should "value demand-side investments equal to traditional investments in supply and delivery infrastructure."	No, DSM resources are not selectable resources, but they modify load growth predictions.	Yes, stakeholders have opportunities to provide comments and engage informally prior to IRP submission, although engagement practices are not required statutorily. See recently updated IRP rules.[66]

PROGRAM EVALUATION

Consistent and clearly defined EM&V requirements help reduce program evaluation complexity, support consistent program planning, and ensure transparency among stakeholders. When expectations are standardized, program administrators and evaluators can streamline processes, minimize confusion, and improve comparability of results across programs and reporting periods. Further, clearly established assumptions and protocols at the state level can help create more consistent program planning among program administrators operating within a single state. States can implement these practices regardless of administrative model and use existing regulatory mechanisms to do so.

Statewide evaluation is increasingly common—even in states without a statewide administrative model—because it creates consistency across programs and often reduces costs compared to each program administrator contracting

[63] Ayres, Kate and Charlotte Shuff. *Long Term Utility Resource Planning: A Guide* (Oregon CUB, 2022). Accessed here.
[64] Louisiana Public Service Commission. *Docket No. R-36262, In re: Possible Modification of the Commission's Integrated Resource Planning Rules to Remove the Exemption for Electric Cooperatives* (2024). Accessed here.
[65] Dominion Energy. *Integrated Resource Plan 2025 Update*. Accessed here.
[66]Missouri Revised Statues § 393.1080. Accessed here. And Missouri Revised Statutes § 393.1900. Accessed here.

separate evaluation firms. Missouri's DSM programs are currently assessed under a statewide evaluation model. Other examples include hybrid models in New Jersey and Maryland, as well as fully statewide approaches in Oregon, Vermont, and Wisconsin. In most cases, statewide EM&V firms are contracted by the state regulator; however, in Oregon, the contract is managed by the statewide administrator, as in utility-run programs in other states.

Additionally, many states maintain a statewide Technical Reference Manual (TRM), which requires programs to use consistent savings assumptions. This standardization benefits both planning and evaluation by ensuring uniform methodologies. In states without a statewide TRM, such as Missouri, program administrators often rely on utility-specific or regional TRMs, a practice also seen in Louisiana and South Carolina. This approach helps maintain some level of consistency while accommodating regional differences, particularly where programs are administered statewide. Table 15 provides a summary of evaluation requirements across the different comparison states included in this study.

Table 15. Comparison of State EM&V Requirements

State	Administrative Model	Evaluator Model	Frequency & Reporting	Statewide EM&V	State-Specific TRM
Maryland	Hybrid	Single statewide evaluator contracted by Maryland PSC	Annual evaluation reports by program	Yes	Yes
New Jersey	Hybrid	Statewide evaluator sets strategy and EM&V protocols; third-party contractors evaluate individual programs	Annual evaluation reports by program	Yes	Yes
Massachusetts	Hybrid	Independent evaluators contracted by program administrators coordinated through the Energy Efficiency Advisory Council Evaluation Subcommittee	At least once during the three-year planning cycle	No	Yes
Oregon	Statewide	Independent third-party evaluators contracted by the Energy Trust, with separate evaluators contracted for programs outside of the Energy Trust	Energy Trust programs are evaluated annually; utility-specific programs vary, but typically every 2–3 years, depending on program size and maturity	Yes	No
Vermont	Statewide	Independent evaluator for Energy Efficiency Utilities contracted by the PSC	Annual reports verifying savings claimed and full evaluation reports as part of three-year planning cycles	Yes	Yes
Wisconsin	Statewide	Third-party evaluator for Focus on Energy contracted by PSCW	Annual evaluation reports	Yes	Yes
South Carolina	Utility administered	Utility-specific and program-specific evaluators	Every 2–3 years	No	No
Louisiana	Utility administered	Utility-specific evaluators under Quick Start rules	Annual evaluations for each program	No	No

6. CUSTOMER ACCESS AND PORTFOLIO PERFORMANCE

Statewide and hybrid models for DSM programs have often been established to expand customer access to more consistent and comprehensive efficiency programming across a state. Additionally, some decision-makers view the statewide model as a means of driving portfolio performance, including energy and demand savings.

Key aspects of administrative models that influence program access and portfolio performance levels include:

- **Availability of efficiency programs** across major customer segments and across energy utility types
- **Industrial opt-out or self-direct provisions**
- **Broader economic influence** of efficiency programs within states
- **Documented energy and demand savings levels** from efficiency programs
- **Cost recovery policies and performance-based incentives,** which can drive greater energy savings

Through interviews with key stakeholders in focal states and the collection and analysis of secondary data, we gathered information on these key factors. We then combined the findings to assess whether the administrative model structure had a positive, negative, or neutral impact on improving customer access to DSM programming and achieving savings goals (Table 16).

Table 16. Summary of Energy Savings Scoring Metrics

Drivers of Missouri Decision	Description	Positive	Neutral	Negative
Customer Access	Ensuring customers across Missouri maintain (or have increased) access to DSM programs and services	Has increased customer access to measures or program services	Has had no material impact on customer access to measures or program services	Has decreased customer access to measures or program services
Achieving Savings Goals	Ensuring energy and demand savings performance and achieving DSM goals	Has had positive impacts on energy, demands savings, or other energy efficiency metrics	Has had no impact on energy, demands savings, or other energy efficiency metrics	Has had negative impacts on energy, demands savings, or other energy efficiency metrics

Overall, states with statewide DSM models appear to have a positive impact on customer access to programs and services, while also achieving savings goals (Table 17). In terms of access, statewide program administrators in Vermont and Wisconsin serve the vast majority of electric customers across municipalities and co-ops. Energy Trust does not serve customers of smaller municipal utilities and co-ops across the state, but it still offers programs to the majority of residential, commercial, and industrial customers. While New Jersey does not offer programs through a single administrator, the combination of core programs offered by the utilities and supplemental programs provided through the New Jersey Clean Energy Program (administered by the BPU) provides expansive customer access to programs across different segments throughout the state in a coordinated way. In terms of savings, we determined that the shift to a statewide model in Oregon, Vermont, and Wisconsin ultimately had a positive impact in those states, driving energy and demand savings primarily by expanding program access to more customers at the time, in addition to strong investment in DSM. While Massachusetts, Maryland, and New Jersey consistently achieve high levels of savings, this was due less to the specific administrative model than to the history and culture of investment in DSM programming in those states. Additional state-level case studies are also available in Appendix A and the comprehensive research and analysis framework is available in Appendix B.

Table 17. Rubric Scores for Customer Access and Achieving Savings Goals across Focal States

State	Statewide Implementation Model Type	Customer Access	Achieving Savings Goals
Oregon	Statewide	Positive	Positive
Vermont		Positive	Positive
Wisconsin		Positive	Positive
Maryland	Hybrid	Neutral	Neutral
Massachusetts		Neutral	Neutral
New Jersey		Positive	Neutral

6.1 ACCESS TO PROGRAMS AND SERVICES

Augmenting customer access to DSM programs is a key motivator for transitioning to a statewide model, particularly in states where smaller utilities, such as co-ops or municipal utilities, may struggle to serve a large number of customers from an DSM perspective. This was especially true in Oregon, where customer access was a primary impetus for moving to a statewide program. While this may add costs in the short term, particularly when the goal is to ensure access for as many residents as possible in rural areas of the state, decision-makers determined it was worth the investment to ensure consistent customer access. Further, DSM experts suggested that while there are short-term cost increases, a statewide model was the most cost-effective way to provide DSM programming to all customers in a given state.

"There's a big push to make sure that all people across the state can participate. And that's good, but it does drive up the cost. It's almost like a balancing act between how much money you're spending and what rural areas [need more representation]. However, pooling programs from all utilities and doing them under one roof theoretically should be more cost-effective. The bottom line is the statewide program can produce better results because they're focused on energy efficiency broadly, and they can have more economies of scale in program development and execution. I think that's where the savings really come."

Utility participation in DSM programming within a state is closely tied to customer access. While Oregon, Vermont, and Wisconsin all incorporate multiple utilities across their respective states, they have slightly different levels of utility participation in the model.

- In **Oregon**, five utilities participate in the statewide program. Two major electric utilities were the original covered entities, but between 2003 and 2017, the program expanded to also support three natural gas utilities.
- In **Vermont**, most utilities participate in the statewide program: one investor-owned utility, roughly 13 municipal or publicly owned electric utilities, and two electric distribution co-ops. The City of Burlington (Burlington Electric Department) and Vermont Gas Systems did not opt into the statewide model and operate as individual Energy Efficiency Utilities (e.g., Efficiency Vermont).
- Most utilities in **Wisconsin** participate in Focus on Energy, including electric cooperatives and municipal utilities. In Wisconsin, there are 13 IOUs, 13 co-ops, and 81 municipal utilities.

In Massachusetts, Maryland, and New Jersey, IOUs all offer some form of DSM programming, but coverage also varies across these states.

- In **Massachusetts**, six electric, natural gas utilities, dual-fuel, and energy service providers are included under the statewide Mass Save brand; however, individual utilities administer DSM programming.

- In **Maryland**, four IOUs, one electric co-op, and one gas utility work together to deliver EmPOWER MD statewide energy efficiency programs. A state agency administers the low-income programs.
- In **New Jersey**, energy efficiency programs are utility-administered, but seven investor-owned gas and electric utilities partner with the BPU to administer the Comfort Partners low-income programs statewide.

Most focal states offered a range of energy efficiency programs, targeting various sectors (Table 18). Notably, when demand response programs were offered through a statewide administrator, they were primarily pilots or targeted interventions in the C&I sector.

Table 18. Utility/Statewide Administrator DSM Program Offerings in Focal States

State	Demand Response	Residential Single Family	Residential Multifamily	Residential Income Qualified	Commercial	Industrial	Building or Vehicle Electrification	Workforce Development	Other
Maryland	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Massachusetts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
New Jersey	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Oregon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vermont	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wisconsin	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes

Providing equitable access to DSM programs can be challenging for any program administrator or model type. Part of increasing program access for customers is understanding how priority customers are served and the current costs the utility incurs to serve them.

"It's important to understand how customers like those in rural areas are served, what is it costing the entities who serve them, and what representation of them is like. This will help stakeholders consider whether a statewide model is a more effective way to serve more customers, both from a cost and efficacy perspective."

In states where the vast majority of customers are served by large IOUs (e.g., New Jersey, where PSE&G and JCP&L serve most customers), switching to a statewide model may add relatively few remaining customers that are served by smaller co-ops or municipal utilities. For Vermont, a small state with numerous small utilities, transitioning to a statewide model proved an effective way to increase the number of customers participating in DSM programs. Additionally, a statewide program may alleviate the burden on smaller utilities with fewer resources by administering DSM.

"Before the administration of a statewide model, not all Vermonters were served equitably by energy efficiency programs. Bringing munis and co-ops into the fold after the establishment of Efficiency Vermont paved the way for increased access to EE for all Vermonters, and relieved smaller utilities of the burden of having to design, implement, and manage their own EE programs."

"We have a lot of co-ops in South Carolina, many of whom are customers of our state-owned utilities [like] Santee Cooper. Their programs are all over the map. There is no consistency. And so, there was some discussion around how do we reach those customers, many of whom are rural [and] are particularly in need of these types of programs. But yeah, they didn't end up taking up [a statewide program] this past session. I hope that's something that we try to figure out because it's a giant unserved market."

Access to statewide programs has been a point of contention for industrial customers in some states. Similar to Missouri, two of the three statewide models (Oregon and Vermont) offer industrial opt-outs for the largest energy users, enabling them to participate in a self-directed program with customized measures. For example, in Oregon, industrial customers were vocal about not wanting to participate in a statewide program due to potential cost increases.

Similarly, in Louisiana, "Industrial customers wanted to keep doing things themselves, didn't see the benefit for themselves." While Wisconsin technically also has a self-directed program for large customers, there have been no participants to date.[67] In the hybrid states (Massachusetts, Maryland, and New Jersey), there is no industrial opt-out option; however, specialized C&I energy efficiency programs are available.

DSM decision-makers also look to DSM programs for their potential to produce economic benefits for their state beyond energy and demand savings. Our research did not suggest that a particular administrative model has made a greater economic impact in the comparison states. However, we did find evidence that the existence of DSM programs produced some benefits. As such, programs or models that prioritize access and participation may yield higher economic benefits. From a contractor perspective, models that make it easier for trade allies to participate in DSM programs offered throughout the state (e.g., Oregon and New Jersey) reduce administrative burden and are positive for contractors working in the industry (see Section 5.3.1).

The economic impact of DSM programs has been well researched. For example, economic impact analyses completed by ECONorthwest found that between 2008 and 2012, DSM investment in Oregon contributed $342 million to the state's gross regional product and added approximately 4,931 jobs.[68] In Massachusetts, the Clean Energy Center reported that the clean energy sector workforce has doubled in size since 2010, now supporting 115,291 direct jobs across 7,512 businesses.[69]

From a qualitative perspective, one DSM expert with experience in several of our comparison states highlighted the positive impact statewide DSM programs have on economic development. They highlighted two key points: (1) DSM programs may have a "multiplier" effect, where investments in DSM over time produce greater economic benefits for customers and businesses; and 2) with the rise of equity-focused programming, more low-income consumers stand to benefit, not just affluent and large commercial organizations.

"I've been involved in several economic development studies over the years that I think certainly show that energy efficiency programs have a multiplier effect. It'd be hard for them not to. I certainly think these programs, in and of themselves, help economic development, by and large. I also think, at least in the very active energy efficiency states, these programs are disproportionately benefiting affluent people and large commercial organizations. I think

[67] ACEEE. *Self Direct and Opt-Out Programs*. Accessed here.

[68] Whelan, Robert et al. *The Economic Impacts and Macroeconomic Benefits of Energy Efficiency Programs in Oregon* (ECONorthwest). Accessed here.

[69] MassCEC. *2024 Massachusetts Clean Energy Industry Report*. Accessed here.

efforts are underway to make them more equitable, and those efforts are coming to fruition to some extent."

6.2 ENERGY SAVINGS

Most states in the study's comparison group achieved higher-than-average energy and demand savings, regardless of the administrative model type. We heard from comparison state representatives with statewide models that, in theory, energy savings are enhanced by the administration of DSM programs at the statewide level due to expanded access. Regardless of the model type, states can set aggressive savings goals, adopt energy efficiency resource standards, or employ other policy mechanisms, such as cost-recovery models, to drive savings.

DSM experts representing states with statewide administrative models emphasized how having an organization whose sole responsibility is to administer DSM can, in theory, lead to greater energy savings. They noted that the profit motive for utilities does not necessarily align with achieving the maximum amount of savings. Further, utility-driven DSM models often establish minimum savings targets, whereas statewide administrators are often compensated based on their savings performance. Revenue decoupling and regulatory approaches that align performance incentive mechanisms (PIMs) with investments in energy efficiency can, however, improve alignment between utility business models and energy efficiency investments.

"Savings performance. Well, I mean, just my gut sense is that there's the greater savings with a statewide model because the people running it are incented to do as much as they can. The utilities would be incented to do the minimum amount required or push back and say, 'We can't do it.' So, I think the statewide model, at least in the ones that I've observed, appear to be reasonably successful with dedicated professionals."

"I think what happens in a statewide model is you have an entity that their driving purpose here is to achieve energy savings. It's not like where for utilities in Wisconsin, there was always some ambivalence about that. When utilities were running their own programs in Wisconsin, if on November 15th the utility hit their annual goal, they dropped processing rebates until the new year because they didn't want to save more energy than they committed to having to save. And Focus [on Energy] would never do that."

We also analyzed energy savings as a percentage of total retail sales available through ACEEE's database, which includes data from 53 utilities nationwide, for the years 2015, 2018, and 2021. We included program administrators or utilities across the focal states, including Missouri, to assess whether the model type may be a contributing factor in increased energy savings (Table 19). While utilities in Vermont and Oregon (statewide models) appear near the top of the list, WE Energies in Wisconsin (also a statewide model) has seen declining savings as a share of retail sales over time, suggesting that other factors may be driving performance. Further, Ameren Missouri (a utility-administered program model) achieved markedly higher savings as a share of retail sales than utilities in other states with different administrative models. While this analysis is not comprehensive, it suggests that a range of factors beyond the administrative model may drive DSM performance.

Table 19. Utility Program Administrator Portfolio Energy Savings

DSM Program Administrator	State	Administrative Model	Lifetime Savings as Percent of Retail Sales (2015)	Lifetime Savings as Percent of Retail Sales (2018)	Lifetime Savings as Percent of Retail Sales (2021)
Eversource MA	MA	Hybrid	41.57%	31.52%	22.37%
Efficiency Vermont	VT	Statewide	25.78%	25.03%	17.10%
Portland General Electric	OR	Statewide	18.29%	20.65%	12.32%
Ameren Missouri	MO	Utility Administered	13.75%	11.58%	14.68%
WE Energies	WI	Statewide	11.19%	11.34%	6.13%
Baltimore Gas & Electric	MD	Hybrid	10.36%	15.73%	8.32%
Jersey Central Power & Light	NJ	Hybrid	6.03%	4.38%	0.70%
Dominion Energy South Carolina	SC	Utility Administered	4.22%	2.65%	2.79%
Entergy Louisiana	LA	Utility Administered	0.51%	0.18%	1.63%
Average, All Major Utilities			**2.75%**	**2.65%**	**2.31%**

Note: Average derived from ACEEE database of 53 utilities across the U.S., serving in total roughly 60% of U.S. customers.

6.3 DEMAND RESPONSE

All the statewide programs included in our comparison group (Oregon, Vermont, and Wisconsin) keep DR largely separate from the third-party administrator and under the utilities' purview. For example, in Oregon, the major utilities run a range of DR programs focused on the C&I sector (agricultural, direct load control pilots, and firm load reduction programs) and the residential sector (water heater pilot programs in single and multifamily residential, and direct load control and residential pricing pilots).[70] In Vermont, while distribution utilities retain DR programs, Efficiency Vermont has explored incorporating DR and demand flexibility offerings into its program portfolio and runs small water heater demand flexibility pilots in partnership with the distribution utilities.[71] Wisconsin has also conducted preliminary research into potentially incorporating more demand flexibility offerings into the Focus on Energy program and already collaborates with distribution utilities to combine efficiency with smart thermostat load-shifting programs.[72]

Most of the hybrid administrative models we reviewed featured DR programs within their DSM portfolios. Maryland EmPOWER programs also include demand response programs, as "cost-effective demand response programs" are required by Maryland's law establishing EmPOWER statewide program planning. Currently, there is no specific target for program size beyond what was necessary to achieve the 2015 peak load reduction targets. Similarly, New Jersey incorporates demand response programs and goals into its efficiency program planning, building on a demand flexibility roadmap completed for the state in 2025.[73]

Massachusetts provides one example of a state that has established a statewide program model. In Massachusetts, DR is administered through a statewide program in which the electric utilities operate under common program rules, standardized incentives, and a shared DERMS platform, with platform costs cost-shared among utilities. A single

[70] Oregon Public Utility Commission. *Demand Response*. Accessed here.

[71] Vermont Energy Investment Corporation. *Using Thermal Energy Storage to Relieve Peak Demand* (2019). Accessed here.

[72] Illume Advising, LLC. *Focus on Energy Load Shaping Research* (2022). Accessed here.

[73] Murphy, Sean and Josh Schellenberg. *Demand Response Roadmap for the New Jersey Board of Public Utilities*. (Berkeley Lab, 2025). Accessed here.

DERMS provider coordinates dispatches and maintains ongoing communication with utilities to align event timing, implementation, incentive payments, and ISO engagement, while still allowing utilities to call targeted events for local distribution needs, including non-wires alternative (NWA) areas where add-on incentives may apply. DR benefits are similar for avoided capacity and transmission but differ at the distribution level. This statewide structure enables economies of scale in vendor procurement and consistent customer experience, while also allowing customization in incentives and dispatch when needed.

6.4 COST RECOVERY MODELS

All comparison states recover costs from their DSM programs regardless of the administrator by adding a small surcharge to customers' bills. These surcharges, through various mechanisms, are designed to fund DSM programs in those states (Table 20). The authority to levy or approve these surcharges varies across states; however, all cost recovery is subject to some form of benefit-cost test during program planning or evaluation. Most states in our comparison group base the surcharge amount on anticipated program costs and performance, allowing for "true-ups" at regular intervals based on actual DSM program spending and results. States with a third-party statewide administrator (e.g., Vermont, Oregon, and Wisconsin) set their surcharges based on electricity or natural gas revenues or sales. Table 20 provides an overview of the different cost-recovery mechanisms in the comparison states, including the authorization and approval processes, and different mechanisms for encouraging performance.

Table 20. Comparison State Cost Recovery Mechanisms

State	Administrative Model	Minimum Cost Recovery Mechanism	Authority and Approval Process	Financial Performance Incentive	Revenue Decoupling
Maryland	Hybrid	Energy efficiency surcharge based on projected program costs recoverable on customer utility bills.	PSC approval through semi-annual filings	Yes	Yes
New Jersey	Hybrid	Energy efficiency surcharge based on projected program costs recoverable on customer utility bills.	NJBPU approves program budgets and cost recovery through Triennial Program Filing	Yes	Yes
Massachusetts	Hybrid	Energy efficiency surcharge on projected program costs recoverable on customer utility bills.	Approved by DPU during the three-year EE plan filings	Yes	Yes
Oregon	Statewide	Public Purpose Charge (PPC) at 1.5% of electric revenue for statewide programs, plus additional tariff-based riders for utility-specific DSM, administered via customer bills.	PPC is established by statute; Additional riders are subject to PUC review annually	No	Yes
Vermont	Statewide	Statewide energy efficiency volumetric charge imposed on electricity and natural gas customers and administered via customer utility bills.	Set through PUC rulemaking	Yes	Yes

State	Administrative Model	Minimum Cost Recovery Mechanism	Authority and Approval Process	Financial Performance Incentive	Revenue Decoupling
Wisconsin	Statewide	Utility contributions to statewide program (approximately 1.2% of annual retail revenues) recovered on customer bills; supplemental riders for additional utility-administered programs.	Public Benefits Fund (approx. 1.2% of revenues) established via statute; supplemental riders approved by PSCW on a case-by-case basis	Yes	No
South Carolina	Utility administered	Energy efficiency surcharge based on projected program costs and lost revenues recoverable on customer utility bills.	Approved for individual utilities by the PSC through an annual filing	Yes	No
Louisiana	Utility administered	Energy efficiency surcharge based on projected program costs and lost revenues recoverable on customer utility bills.	Approved annually through utility rate cases	No	No

Performance incentives that allow program administrators to earn additional compensation for meeting or exceeding certain metrics are present in all states but Oregon and Louisiana. Decision-makers (in most cases, public utility commissions) set metrics based on energy or demand savings, or other state-specific policy goals. In some states (e.g., Massachusetts and New Jersey), public utility commissions have also established financial penalties for underperformance. For example, New Jersey and South Carolina use a shared savings performance incentive system. Utilities receive financial rewards when they meet or surpass their yearly energy savings goals. The reward is determined as a percentage of net benefits, calculated as benefits minus costs, using the Total Resource Cost (TRC) test. If utilities do not meet their targets, their incentives may be decreased or revoked.

Another mechanism some states have employed to encourage performance is decoupling cost-recovery from lost revenue. Revenue decoupling is a regulatory tool that separates a utility's earnings from the amount of energy it sells. In New Jersey, this system helps utilities remain financially healthy, even when energy efficiency efforts result in lower customer usage. By making regular adjustments, utilities can recover their approved revenue target regardless of changes in sales, removing any disincentive to encourage energy-saving initiatives.

In contrast with adding performance incentives on top of standard DSM targets, Vermont PUC established a performance-based framework for Efficiency Vermont and other utilities that serve as an Energy Efficiency Utility (e.g., Burlington Electric Department and Vermont Gas Systems), where administrators earn incentives based on meeting certain performance standards, rather than recovering costs based on program budgets.

> *"[Efficiency Vermont] is a performance-based utility. We are allowed cost reimbursement on our expenses. But fundamentally, at this point, it is 100% performance paid, meaning that allowable expenses are reimbursed basically on a rolling basis with our fiscal agent. But we only get paid once a year and we have a 5% performance award. We do not get paid a penny for work if it doesn't create positive electric system benefits overall."*

Oregon's legislature recently approved SB 688, mandating the Public Utility Commission to create a performance-based regulatory framework. This framework is designed to motivate utilities to achieve objectives such as energy efficiency, demand response, clean electricity, affordability, and reliability. The framework must be finalized by January 2, 2027, and the PUC is required to submit a first progress report by November 15, 2028.

7. FINDINGS AND RECOMMENDATIONS

This section summarizes the findings and recommendations from this study. We provide general findings and recommendations from our research, and findings specific to Missouri's DSM stakeholder policy interests, outlined in Table 21. We also completed literature reviews to assess opportunities for statewide administration of DSM financing and emerging technology programs, and present those findings and recommendations in Appendix F and Appendix G, respectively. Where we have identified specific opportunities for action, we highlight those as recommendations.

Table 21. Missouri Policy Interests

Policy Interest	Description
Cost Savings	Opportunities to find efficiencies and cost savings moving to a statewide or hybrid model
Customer Access	Ensuring customers across Missouri maintain (or have increased) access to DSM programs and services
Governance and Oversight	Maintaining appropriate governance while reducing complexity, promoting collaboration among stakeholders
Achieving Savings Goals	Ensuring energy and demand savings performance and achieving DSM goals

- **In the current state, Missouri's DSM programs, particularly energy efficiency, play a limited role in addressing energy affordability concerns in the face of load growth.** Although IRP models consistently identify energy efficiency as a least-cost resource, its potential is not fully realized in practice in Missouri. Several DSM stakeholders in Missouri suggested that the value of efficiency in capacity is underrecognized in planning for the state's future resource needs. Shifts in commission priorities and changes in Missouri's policy context since the passage of MEEIA have led to uncertainty and disagreement among decision-makers regarding the role of energy efficiency in addressing current challenges, such as load growth and affordability. Additionally, DSM stakeholders suggested that state decision-makers may perceive utility cost-recovery mechanisms for efficiency as overly lucrative, leading them to view DSM programs as a source of utility profit rather than a customer benefit.
- **The DSM framework created by the Missouri Energy Efficiency Investment Act (MEEIA) requires some adjustments to address Missouri's current and future energy needs more effectively.** Missouri's DSM program framework has not undergone substantial updates in over a decade, leaving rules and goals misaligned with current market and policy conditions. Administrative processes are overly complex, characterized by frequent and time-consuming reporting and approval cycles, as well as inconsistencies stemming from variations in utility technical resource manuals and evaluator practices. Program access and benefits are uneven across the state—rural customers and those served by small municipal and cooperative utilities often lack the same opportunities as customers of larger investor-owned utilities. Additionally, the absence of cost-recovery mechanisms for gas utilities limits incentives for investment in energy efficiency, further constraining program reach and impact.
- **Comparison states moved to shift the administrative structure of their DSM model in response to specific policy concerns.** In several states, the design and evolution of DSM administrative models have been strongly influenced by policy drivers. Legislative mandates, regulatory priorities, and state energy goals have served as catalysts for adopting alternative structures, such as independent administrators or the establishment of a statewide DSM brand, aimed at improving access, portfolio performance, consistency, reducing administrative burden, and aligning programs with broader policy objectives.
  - **Recommendation:** Clarify and prioritize policy drivers for Missouri's DSM portfolios. Based on this study, we understand the major policy priorities of DSM administrative models for Missouri DSM stakeholders to include: Reducing the cost required to operate these programs, thereby reducing the cost borne by Missouri's customers; reducing the complexity of DSM programs from a customer and regulatory perspective; enhancing collaboration across DSM stakeholders in the State; and expanding access to DSM programs and overall

portfolio performance. We recommend that DSM stakeholders engage additional participants (e.g., state legislators, electric co-operatives, municipal utilities) to validate these priorities and establish consensus on which drivers should be emphasized as Missouri considers adjustments to its DSM administrative model.

- **Existing MEEIA statute provides sufficient flexibility for the Missouri PSC to make changes to the administrative model without amending the statute or introducing new legislation.** Missouri's current MEEIA legislation already provides significant regulatory flexibility in administering DSM programs. That said, if stakeholders pursue a legislative pathway to establish a statewide administrative model, developing model legislative language to amend MEEIA could help strengthen statutory clarity and ensure alignment with the state's policy objectives. We provide example legislative language for amending MEEIA as Appendix C.
- **Statewide coordination of DR programs faces significant operational challenges.** Differences between MISO and SPP, along with the distinct operational requirements of Ameren Missouri and Evergy, make achieving full statewide coordination of DR programs highly complex. Market rules, accreditation structures, dispatch requirements, and monetization pathways vary significantly across these RTOs. Imposing uniformity risks creating artificial consistency where customization is essential for DR effectiveness. As a result, a statewide framework may struggle to deliver administrative efficiencies without compromising the flexibility needed to align DR design, dispatch, and value streams to each utility's unique system conditions.
  - Recommendation: Rather than pursuing full statewide standardization, Missouri stakeholders should focus on developing a coordination framework that preserves flexibility for utilities operating in different RTO environments. This could include establishing shared principles for DR program objectives and reporting while allowing customization in design and dispatch to reflect market-specific requirements. Such an approach balances the benefits of collaboration with the operational realities of each utility, ensuring DR programs remain effective and aligned with their respective value streams.

7.1 COST SAVINGS

- **The DSM administrative model alone does not drive cost efficiency.** Qualitative evidence from comparison states with fully statewide administrative models indicates that statewide models do not inherently reduce administrative expenses, especially in the short-term. While some DSM experts noted that there are likely longer-term cost efficiencies resulting from having a single statewide administrator, they also acknowledged that establishing an administrator would likely incur upfront costs. It is also important to note that administrative cost savings were not among the chief goals for establishing a statewide model in our comparison states that had done so (i.e., Oregon, Vermont, and Wisconsin), but rather these states were focused on expanding program access and improving overall portfolio performance. In 2024, the average share of non-incentive spending[74] under statewide models was approximately 47% of total DSM expenditures, compared to 35% for Missouri's largest, regulated utilities (see Table 9). This does not, however, account for the dozens of other co-ops, municipal utilities, and other small utilities in the state that may be seeing much higher non-incentive costs. This suggests that while statewide models may offer benefits such as improved consistency, customer access, and stakeholder coordination, they may not materially reduce the costs of administering DSM programs.
- **Shifting to a fully statewide administrative model for Missouri DSM programs would likely increase costs in the short term.** Moving to a statewide administrative model for DSM programs in Missouri would likely require significant upfront investment to establish new governance structures, consolidate program administration, and harmonize processes across utilities. These short-term costs could include system integration, stakeholder

[74] Non-incentive spending is a broad category that covers the wide range of utility expenditures that fall outside of direct program incentive spending. This can include administrative overhead, but also covers categories such as contractor support, outreach and marketing, evaluation, and other program aspects that may constitute essential supports for effective program delivery. Utilities vary widely in how they characterize administrative vs. non-administrative spending.

coordination, and potential duplication during the transition period. However, over time, a centralized model may deliver cost savings through economies of scale, streamlined reporting and evaluation, reduced administrative redundancies, and improved program consistency. These efficiencies could enhance overall portfolio performance and lower the cost per unit of energy savings, ultimately benefiting customers.

- **Policy and other strategies to coordinate among program administrators can reduce DSM portfolio costs without changing the administrative model.** Several approaches used in other states could help lower the cost of operating DSM portfolios in Missouri while delivering additional benefits, such as reducing regulatory complexity and enhancing the customer and trade ally experience. Examples include implementing administrative cost caps (e.g., Oregon's 6.5% cap; see page 21), working across program administrators and equipment suppliers (see Vermont's example on page 24), and streamlining data access and sharing requirements (see page 35).

7.2 GOVERNANCE AND OVERSIGHT: FOSTERING COLLABORATION AND REDUCING COMPLEXITY

- **Supporting components, not the administrative model alone, drive complexity reduction and collaboration.** The study found that while adopting a statewide administrative model can help reduce complexity and foster collaboration, these benefits are largely achieved through supporting components rather than the model itself. Mechanisms such as statewide planning and evaluation tools, clear protocols, and standardized processes were reported by DSM experts as critical for improving collaboration and consistency. Additionally, a statewide framework can simplify experiences for customers, trade allies, and stakeholders navigating planning and evaluation processes.
  - **Recommendation.** Consider establishing a statewide framework of common DSM metrics, such as EERS and cost-effectiveness standards, supported by standardized protocols, shared planning and evaluation tools, and consistent processes. These components, rather than the administrative model alone, are key to reducing complexity, fostering collaboration, and simplifying customer and stakeholder experiences.
  - **Recommendation:** Explore further coordination and consolidation of program delivery under the existing DSM model. Missouri DSM stakeholders should consider further consolidating program delivery as a potential strategy to reduce complexity, realize administrative efficiencies, and improve consistency. While the state is already exploring contracts with a statewide evaluator, similar consolidation could be achieved by engaging a single implementation firm to deliver programs across participating utilities. This approach would require enhanced initial coordination, including the development of a statewide TRM, alignment of program designs, and agreement on contractual terms among utilities. If implemented effectively, this strategy could streamline processes, reduce duplication, and improve overall portfolio performance, especially over the long-term.
  - **Recommendation**: If considering centralized or statewide administration, decision-makers should develop and formalize memoranda of understanding that outline data-sharing best practices and requirements among utilities, regulators, third-party administrators, and other stakeholders. Clear agreements on data access, security, and reporting standards will reduce barriers to DSM program delivery, improve transparency, and enable more efficient planning and evaluation.
- **Statewide model implementation requires a multiyear transition and ongoing evolution.** Across the states examined with statewide administrative models, each followed a similar two-year timeline from legislative approval to full implementation. This indicates that transitioning to a statewide framework is a multiyear process requiring significant planning, stakeholder coordination, and system integration. Furthermore, experience from states such as Maryland, Vermont, and New Jersey shows that administrative models often evolve. These states initially implemented a foundational structure but later adjusted their models to address emerging challenges and better

align with policy objectives. This underscores the importance of designing a flexible framework that can adapt as conditions and priorities change.

- **Well-structured stakeholder advisory groups enhance collaboration and inclusivity.** Stakeholder advisory groups with clearly defined roles in the regulatory approval process and balanced membership can significantly improve collaboration across DSM stakeholders. Successful models in other states often include a dedicated facilitator and representation from a broad range of expertise, including DSM programming, public housing, commercial and industrial sectors, residential programs, or policymaking. Additionally, reimbursing participants for their time, particularly ratepayer advocates, public housing representatives, and stakeholders serving low-income communities, helps ensure equitable participation and diverse perspectives in decision-making.
  - Recommendation: Reinvigorate the MEEAC by clarifying its role in the regulatory process, updating membership to ensure balanced representation across sectors, and appointing a dedicated facilitator to drive progress towards shared goals across the state. Consider providing a stipend or financial reimbursement to encourage participation from organizations representing low-income communities, public housing residents, and ratepayer advocates.

7.3 INCREASING CUSTOMER ACCESS AND PORTFOLIO PERFORMANCE

Statewide models can enhance customer access and portfolio performance. Statewide administrative models are particularly effective when the primary objectives include expanding customer access—especially for customers served by smaller utilities—and increasing overall energy and demand savings. By centralizing program delivery and resources, these models can reduce disparities in program availability, improve consistency, and leverage scale to achieve greater portfolio-level impacts. Interviews with DSM representatives from states with a statewide administrative model (Oregon and Vermont) emphasized that the move to a statewide model was driven by a desire to increase customer access to DSM programs, especially for those served by smaller utilities, such as electric cooperatives, and for those living in rural communities.

APPENDIX A. COMPARISON STATE CASE STUDIES

OREGON CASE STUDY

Energy Trust of Oregon

- Statewide model
- Administered by an independent nonprofit
- Implementation began in 2002
- Includes five IOUs, including electric and natural gas

Portfolio Goals

Oregon's energy efficiency resource standard (EERS) sets annual savings targets for electricity and natural gas sales. Gross incremental savings for electricity must average 1.4% between 2022 and 2025. There is also a target of 0.85% gas savings between 2024 and 2025. Electric companies must direct at least 13% of their collected funds to low-income weatherization.

Statewide Implementation Timeline

Although SB 1149 authorized an independent organization to implement energy efficiency programs in 1999, Energy Trust of Oregon and the Oregon Public Utilities Commission did not finalize a grant agreement until 2001. Energy Trust finally began its program operations in March 2002.

Oregon has ambitious goals to decarbonize its power supply. By 2040, the state's largest electric utilities (i.e., Portland General Electric, Pacific Power and Light) must supply 100% clean electricity. By 2050, the state will achieve an 80% reduction in economy-wide greenhouse gas emissions and a 90% reduction in emissions related to natural gas, propane, and liquid fuels. The Oregon Energy Strategy, published in 2025, describes how the state will achieve these objectives.[75] Its focus areas are energy efficiency, clean electricity, electrification, low-carbon fuels, and resilience.

PROGRAM HISTORY

S.B. 1149 (1999) directed the state's largest electric utilities to collect a public purpose charge from consumers to support statewide energy efficiency programs. The law also authorized an independent nonprofit organization to use these funds to administer statewide energy efficiency programs. Energy Trust of Oregon, the new program administrator, must report to the legislative assembly biannually on program results and spending. HB 3141 (2021) reduced the amount of the public purpose charge and modified Energy Trust's reporting requirements. Energy Trust contracts with the state and coordinates with utilities to deliver energy efficiency programs. Energy Trust has three advisory councils specializing in Conservation, Diversity, and Renewable Energy.

Energy Trust primarily advances energy efficiency through buildings programs. Although it participates in some market transformation initiatives, most of its work involves providing financial incentives to help residents and commercial customers afford energy-efficient upgrades. Energy Trust works with the Public Utilities Commission and five participating utilities to develop and assess programs.

Some of Energy Trust's key programs include:

- Residential: Serving single family homes with weatherization upgrades and financial incentives for EE products
- Existing Buildings: Serving multifamily and commercial buildings with financial incentives and energy performance services for whole building upgrades
- New Buildings: Providing financial incentives and workforce development for new commercial buildings

PROGRAM CONTEXT

Oregon considers DR programs separate from EE, which are run by utilities rather than Energy Trust. Energy Trust has contracts with various state agencies and utilities to deliver DR programs. For example, the Smart Grid Test Bed Collaboration involves a subcontract between Energy Trust and Portland General Electric. The program aims to achieve at least 10% energy savings from participants, primarily through distributed energy resources, such as smart thermostats, smart water heaters, and smart battery storage.

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[75] Oregon Department of Energy. *Oregon Energy Strategy* (2025). Accessed here.

Five utilities (Portland General Electric, Pacific Power and Light, Northwest Natural Gas, Cascade Natural Gas, and Avista) add a public purpose charge to customers' utility bills to fund Energy Trust's programs. Customers of these utilities can then enroll in the state's various energy conservation programs. In turn, utilities help Energy Trust implement programs and evaluate savings, in line with Energy Trust's goals.

Utilities must add a 1.5% (previously 3%) public purpose charge to customers' bills. The funds from this charge go toward state energy conservation programs. Some programs are supported through subcontracts between utilities and Energy Trust. Utilities cannot invest in supply-side resources until they have pursued all cost-effective energy efficiency savings. Administrative costs are capped at 6.5% of total expenditure.

Bulk Purchasing and Administrative Cost Sharing

There have been settlements between major natural gas utilities and the Oregon PUC, which have resulted in contracts with Energy Trust for efficiency services.

PLANNING, REPORTING, AND EVALUATION

Energy Trust sets annual performance metrics for the Public Utilities Commission to approve. Once finalized, utilities must then incorporate these targets into their integrated resource plans. Energy Trust provides utilities with a DSM resource forecast that identifies cost-effective energy efficiency savings potential over 20 years.[76] Utilities such as Portland General Electric can then incorporate these forecasts into their own load forecasting models. Utilities need to pursue such savings prior to investing in supply-side resources.

Every two years, the legislature must receive a report on spending and outcomes related to the public purpose charge. The most recent report covers activities from July 2021 to June 2023. It reports spending allocations, annual greenhouse gas emissions reductions, energy savings, and the number of projects completed per program.[77]

[76] Portland General Electric (PGE). *2023 Clean Energy Plan and Integrated Resource Plan Update* (2025). Accessed here.

[77] Evergreen Economics. *Report to Legislative Assembly on Public Purpose Charge Receipts and Expenditures* (2023). Accessed here.

MARYLAND CASE STUDY

EmPOWER Maryland

- Hybrid model involving state and utility collaboration
- Maryland's Department of Housing and Community Development and six participating utilities work together to administer programs
- Implementation began in 2008

Portfolio Goals

The Climate Solutions Now Act requires utilities to achieve annual, incremental gross energy savings of 2% between 2022 and 2024. Those targets rise to 2.25% annual savings from 2025 to 2026 and 2.5% annual savings in 2027 and beyond.[78] In 2023, the Public Service Commission enacted an order to transition EmPOWER's energy savings goals to GHG abatement targets for the 2024–2026 program cycle.

Statewide Implementation Timeline

Beginning with the 2008 calendar year, the Public Service Commission will calculate annual per capita electricity consumption and per capita peak demand. September 1, 2008, was the original deadline for utilities to submit their energy reduction plans to the Public Service Commission. New plans are due every three years after that date.

Maryland's Climate Solutions Now Act (2022) commits the state to reducing greenhouse gas emissions by 60% by 2031, achieving net-zero emissions by 2045. At the time, the law was the most aggressive emissions reduction target in the nation.[79] The Climate Solutions Now Act updated Maryland's energy efficiency resource standard (EERS) to achieve more ambitious annual, incremental gross energy savings.

PROGRAM HISTORY

The EmPOWER Maryland Energy Efficiency Act (2008) created the EmPOWER Maryland program and set goals for statewide electricity consumption and peak demand reductions. In 2022, the Climate Solutions Now Act set more ambitious annual energy savings goals, placing greater emphasis on associated reductions in greenhouse gas emissions. In 2024, HB 864 established a stakeholder advisory group for the EmPOWER program and required utilities to incentivize electricity over gas.

Maryland's Department of Housing and Community Development (DHCD) runs EmPOWER, with regulatory oversight from the Public Service Commission. Participating utilities administer programs to help meet EmPOWER's savings goals. All programs affiliated with EmPOWER contribute to its overall goals.

Program offerings vary by utility, but eligible upgrades based on program type include:

- Residential: Appliance rebates and recycling, home energy improvement (i.e., weatherization), residential new construction, and schools
- Commercial: Equipment upgrades, HVAC retrofits, weatherization, and custom incentives

PROGRAM CONTEXT

Demand response and energy efficiency programs both contribute to EmPOWER's goals. EmPOWER's demand response programs allow utilities to briefly curtail customers' central air conditioning and electric heat pump usage during peak demand periods. Customers choose a percentage reduction in the air conditioner compressor working cycle. Larger percentages result in higher incentive payments from utilities.

The Maryland DHCD offers limited-income programs for single-family and multifamily weatherization. The DHCD is required to coordinate ratepayer funding for these programs along with EmPOWER's limited-income program offerings.

Once every three years, utilities must submit plans to the Public Service Commission that describe how they will reduce energy consumption and peak demand. Each plan must describe programs and services offered, anticipated costs, projected savings, and any other information requested by the Public Service Commission.

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[78] Mah, Nadel, and Subramanian. *Next Generation Energy Efficiency Resource Standards Update* (2025). Accessed here.
[79] United States Climate Alliance. *2022 Alliance Member Factsheet: Maryland* (2022). Accessed here.

Bulk Purchasing and Administrative Cost Sharing

EmPOWER does not publicize information on bulk purchasing or administrative cost-sharing.

PLANNING, REPORTING, AND EVALUATION

Every three years, utilities must submit plans to the Public Service Commission that describe how they will reduce energy consumption and peak demand. Each plan must describe programs and services offered, anticipated costs, projected savings, and any other information requested by the Public Service Commission. These plans must meet targets set forth by the Public Service Commission's Comprehensive Energy Forecast.[80]

EmPOWER utilities are required to submit annual reports that cover program spending, energy savings, participation metrics, and cost-effectiveness results. The Public Service Commission's independent evaluator prepares a consolidated evaluation report each year, published by the Public Service Commission, that verifies savings, cost-effectiveness, and program assumptions. At the end of each three-year cycle, a comprehensive evaluation is conducted to inform the next cycle's plan. The most recent annual report covers EmPOWER's portfolio in 2024,[81] and the most recent program cycle report covers 2021–2023.[82]

[80] Maryland General Assembly. *2025 Regular Session - House Bill 1037 First Reader* (2025). Accessed here.

[81] Maryland Public Service Commission. *The EmPOWER Maryland Energy Efficiency Act Report of 2025* (2025). Accessed here.

[82] Maryland Public Service Commission. *The EmPOWER Maryland Energy Efficiency Act Report of 2023* (2023). Accessed here.

MASSACHUSETTS CASE STUDY

Mass Save

- Hybrid model
- Mass Save is not an independent organization but rather a collaboration between multiple participating utilities
- The Massachusetts Department of Energy Resources and Energy Efficiency Advisory Council provide additional support
- Implementation began in 2008

Portfolio Goals

Massachusetts has an EERS with electric incremental net savings targets of 1.25% in 2022, 1.11% in 2023, and 1.08% in 2024. Gas utilities have separate, individual annual targets.

Statewide Implementation Timeline

Massachusetts enacted the Green Communities Act in 2008, which mandated energy efficiency across electric and gas utilities and established the Energy Efficiency Advisory Council (EEAC) to oversee statewide program development.

The program was implemented in 2009 and operates a three-year planning cycle through program administrators, the EEAC, and the Department of Public Utilities. Utilities were legally mandated to enroll as program administrators beginning with the program's inception.

"An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy" (2021) committed Massachusetts to reducing greenhouse gas emissions by 75% by 2040 and net-zero emissions by 2050. Massachusetts' 2025/2030 Clean Energy and Climate Plan (approved 2022) outlines various strategies to help the Commonwealth achieve statewide and sector-specific emissions reductions. For buildings, Massachusetts aims to reduce heat-related emissions by 28% by 2025 and by 47% by 2030.[83]

PROGRAM HISTORY

"An Act Relative to Green Communities" (2008) introduced a comprehensive energy policy for Massachusetts that covered energy savings, greenhouse gas emissions reduction, renewable energy development, and other clean energy topics. The law established a "green communities" program that helps municipalities pursue energy efficiency through financial and technical assistance.[84] The law also defined funding sources, oversight, low-income program spending requirements, and opportunities for gas utility efficiency.

After the passage of the Green Communities Act, multiple electric and gas utilities banded together to create Mass Save. Mass Save is not a standalone organization but rather a joint initiative run by the participating utilities.[85] Mass Save separates its programs into one of three sectors: residential, low-income, and commercial and industrial. Across all programs, decarbonization and equity are major priorities. Many programs promote electrification through heat pump adoption; one program declines to subsidize gas equipment. Mass Save specifically seeks to increase participation among underrepresented groups, including low- and moderate-income households, environmental justice communities, renters, and non-native English speakers.

PROGRAM CONTEXT

Mass Save's Connected Solutions program aims to reduce system peak load from buildings. Program administrators temporarily change customers' temperature setpoints during peak demand events, thus reducing on-site load. The program pays customers to incentivize peak load reductions. Currently, the program is working to better reach low-income customers who may not have stable Wi-Fi, as well as renters whose landlords may not want to install smart technology.[86]

Mass Save programs are funded through a System Benefit Charge, an energy efficiency charge on customers' utility bills. Additional funding sources include the Forward Capacity Market, the Regional Greenhouse Gas Initiative, and any other funds approved by the Department of Energy Resources.[87]

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[83] The Commonwealth of Massachusetts. *Massachusetts Clean Energy and Climate Plan for 2025 and 2030* (2022). Accessed here.
[84] The General Court of the Commonwealth of Massachusetts. *Chapter 169: An Act Relative to Green Communities* (2008). Accessed here.
[85] Halfpenny, Christina, et al. *Mass Save: A New Model for Statewide Energy Efficiency Programs* (ACEEE, 2012). Accessed here.
[86] Mass Save. *The Massachusetts 2025–2027 Energy Efficiency and Decarbonization Plan* (2024). Accessed here.
[87] Ibid.

Bulk Purchasing and Administrative Cost Sharing

Mass Save does not publicize information on bulk purchasing or administrative cost-sharing.

PLANNING, REPORTING, AND EVALUATION

Program administrators must report annually to the Department of Energy Resources on program participation, energy savings, benefits, and expenditures. For the 2025–2027 program term, Mass Save's evaluation efforts will put greater emphasis on holistic decarbonization and alignment with the state's climate goals. Mass Save will also work with an independent EM&V consultant to conduct evaluation studies.[88]

[88] Ibid.

NEW JERSEY CASE STUDY

Clean Energy Program

- Statewide model, but utilities can offer separate programs
- Administered by the Office of Clean Energy
- Implementation began in 2003

Portfolio Goals

New Jersey has an EERS that was most recently updated in 2020. Beginning in 2022, the state must achieve electric savings of 1.1%. That target rises to 1.45%, 1.8%, and 2.15% in each subsequent year. Gas utilities must achieve 0.75% savings (compared to a three-year average) within the next five years.

Statewide Implementation Timeline

In 2001, the Board of Public Utilities (BPU) approved $358 million in funding for energy efficiency programs. In 2002, the comprehensive resource analysis was renamed the Clean Energy Program. In 2003, the BPU established the Office of Clean Energy to manage NJCEP with stakeholder advisory groups.

Bulk Purchasing and Administrative Cost Sharing

The Clean Energy Program does not publicize information on bulk purchasing or administrative cost-sharing.

New Jersey Executive Order No. 274 (2021) established a target of an 80% reduction in GHG emissions below 2006 levels by 2050, with an interim target of 50% by 2030. The executive order emphasized a whole-of-government, cross-sector approach to decarbonization, focusing on reductions in transportation, residential buildings, commercial buildings, and electric generation.[89]

PROGRAM HISTORY

New Jersey's Public Board of Utilities established the state Clean Energy Program in 2003. The state's 2011 Energy Master Plan was the first major piece of legislation to encourage energy efficiency as a strategy for reducing peak demand. Between 2011 and 2018, New Jersey Governor Phil Murphy passed multiple executive orders to promote clean energy throughout the state and reduce emissions from energy production.

The Clean Energy Program includes multiple sub-programs that serve residents, businesses, nonprofit organizations, and local governments. New Jersey's seven public electric and gas utilities also run energy efficiency programs in support of state energy goals.[90] Some prominent programs include:

- Comfort Partners: A residential weatherization program that provides no-cost services for income-eligible households
- Energy Savings Improvement Program: Energy performance contracting to help local government buildings save energy
- Large Energy Users Program: Financial incentives to help high-energy-consuming commercial and industrial customers reduce their energy consumption

PROGRAM CONTEXT

Energy efficiency programs and demand response programs are run separately. However, both are subject to approval by the Board of Public Utilities.

PLANNING, REPORTING, AND EVALUATION

Every year, utilities must submit a petition to the Board of Public Utilities that describes their compliance with energy efficiency and peak demand programs, their progress toward achieving targets, and cost recovery for their programs. Utilities must also submit implementation and reporting plans to the Board. Such plans must include EM&V strategies to track savings from energy efficiency and demand response measures.

[89] United States Climate Alliance. *2022 Alliance Member Factsheet: New Jersey* (2022). Accessed here.
[90] New Jersey Clean Energy Program. *Energy Efficiency Programs* (2025). Accessed here.

VERMONT CASE STUDY

Efficiency Vermont

- Statewide model
- Administered by the Vermont Energy Investment Corporation (VEIC)
- Implementation began in 1999
- Includes 16 utilities (1 IOU, 13 municipally owned electric companies, and 2 electric distribution co-ops)

Portfolio Goals

Efficiency Vermont publishes triennial Demand Resource Plans that set targets for electric and thermal energy savings, GHG reductions, cost-effectiveness metrics, and equity spending requirements for low-income sectors. As part of its flexible load management efforts, Efficiency Vermont is working with utilities to align program activity with grid reliability, utility costs, and GHG emission reduction.

Statewide Implementation Timeline

Following order S.137 in 1999, the Vermont Public Service Board (now the Public Utilities Commission [PUC]) was directed to establish a statewide energy efficiency program. The PUC formalized the Energy Efficiency Utility structure and initiated a statewide RFP to administer the program. In 2000, VEIC won the RFP to administer Efficiency Vermont and launched in March 2000.

Vermont's energy policy is codified in 30 V.S.A. §202a. It emphasizes the following priorities:

- Adequate, reliable, secure, and sustainable energy service
- Affordability and economic vitality
- Efficient use of energy resources
- Cost-effective demand-side management
- Environmental soundness

The code requires the Vermont Department of Public Service to update the state's Comprehensive Energy Plan every six years with strategies and data related to the state's energy goals. Notably, the plan has committed Vermont to supplying 25% renewable energy by 2025, 45% by 2035, and 90% by 2050.[91]

PROGRAM HISTORY

S.137 (1999) led to the creation of Efficiency Vermont, the first energy efficiency utility in the United States. Efficiency Vermont would provide energy efficiency services to all Vermont consumers to help the state achieve cost-effective energy savings.[92] Programs officially launched in March 2000, and Efficiency Vermont served over 17,000 customers in its first year. By the end of 2011, programs achieved more than $1 billion in energy bill savings and avoided 6.2 million metric tons of GHG emissions.[93]

PROGRAM CONTEXT

Efficiency Vermont runs formal programs centered on specific markets (e.g., businesses or residents) and conducts activities to promote specific technologies (e.g., heat pumps or EVs). Education and outreach are important components across programs and activities. Efficiency Vermont offers technical assistance and connects practitioners through peer networks. Another priority is improving the affordability of energy-efficient products through financial incentives.

The Flexible Load Management program is Efficiency Vermont's primary demand response offering. It combines data analytics, system communication platforms, and load control measures to shift loads to less energy-intensive times of day.[94] Currently, Efficiency Vermont is working with utilities to align program activity with grid reliability, utility costs, and GHG emission reduction.

Vermont's utilities add an Energy Efficiency Charge to all electric customers' utility bills. Proceeds support Efficiency Vermont's distribution utility and transmission operator planning processes. These activities include flexible load management, demand response, and grid modernization efforts. Utilities must report customer data to Efficiency Vermont to inform customer service, especially to help reach underserved communities. Utilities are also

[91] Vermont Department of Public Service. *2022 Vermont Comprehensive Energy Plan* (2022). Accessed here.
[92] Low Income Home Energy Assistance Program (LIHEAP) Clearinghouse. *Vermont PBF/ USF History, Legislation, Implementation*. Accessed here.
[93] Efficiency Vermont. *Little State, Big Impact: 20-Year Impact Report* (2021). Accessed here.
[94] Vermont Energy Investment Corporation. *2025 Update to the Triennial Plan: 2024–2026* (2025). Accessed here.

expected to collaborate with Efficiency Vermont on transportation electrification, thermal energy and process fuels, and combined heat and power (CHP) efforts.

Bulk Purchasing and Administrative Cost Sharing

Under Case No. EEU-2016-03, the PUC ordered EEUs to use consistent cost category definitions, to track and report incentive vs. non-incentive cost ratios and administrative costs as a percentage of total budget, and to submit historical data and metrics. Currently, working directly with suppliers and incentivizing only high-efficiency equipment has negated the need for bulk purchasing and equipment warehousing.

PLANNING, REPORTING, AND EVALUATION

Vermont's Department of Public Service (PSD) is the state's evaluation authority. Every triennial program cycle, it verifies claimed savings, assesses Total Resource Benefits (TRB), reviews peak demand reductions, and evaluates Forward Capacity Market resource delivery. The PSD also prepares annual verification reports for Efficiency Vermont's claimed savings and TRB, and evaluates program cost-effectiveness through the Societal Cost Test.

WISCONSIN CASE STUDY

Focus on Energy

- Statewide administrator
- Administered by Aptim
- Implementation began in 2001
- Includes 13 IOUs, 13 co-ops, and 81 municipal utilities

Portfolio Goals

Wisconsin has an EERS. Between 2023 and 2026, the state plans to achieve a net lifecycle savings target of 22,173 GWh, or roughly 0.5% of incremental annual sales.

Statewide Implementation Timeline

Focus on Energy was established in 1999. Act 141 was enacted on March 17, 2006. The law transferred oversight of Focus on Energy from the Department of Administration to the Public Service Commission. The policy itself does not specify a start date for the new actions.

Executive Order #38 (2019) commits Wisconsin to achieving 100% carbon-free electricity by 2050 and aligning with the Paris Agreement's emissions-reduction targets (though no specific values are listed). Wisconsin's Clean Energy Plan outlines strategies to help achieve these goals, emphasizing equitable job creation, improved reliability and affordability, and a just energy transition.[95] To maximize energy efficiency, the plan recommends expanding the reach of Focus on Energy.

PROGRAM HISTORY

Act 9 (1999) established a statewide energy efficiency program, which became Focus on Energy. The original law funded the program through additional charges on customer utility bills until Act 141 (2005) changed the program's structure and required utilities to devote 1.2% of annual operating revenue to the program. A proposed Senate Bill 795 (2023) would have increased the minimum contribution to 2.4% of annual operating revenue, but the bill did not become a law.

Focus on Energy runs various residential and nonresidential programs in Wisconsin, often working with other organizations to implement programs. During program evaluation, Focus on Energy surveys customers to determine their satisfaction and solicit recommendations. Across multiple programs, participants requested improved communication with Focus on Energy staff and increased incentives.

PROGRAM CONTEXT

Under Act 141, "energy efficiency programs" do not include load management. Focus on Energy doesn't run any programs specifically to reduce demand, but its energy efficiency programs are broadly classified as "DSM offerings."[96]

Although Focus on Energy is Wisconsin's primary energy efficiency initiative, the state's Public Service Commission runs additional programs related to clean energy. Examples include:

- The Energy Innovation Grant program: Clean energy grants for municipalities, universities, schools, and hospitals, as well as certain manufacturers
- Rural Energy Startup program: Energy efficiency funding for rural communities
- Grid Resilience program: Grid infrastructure improvements to protect against extreme weather events
- Residential Energy Contractors Grant program: Workforce development

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[95] Wisconsin Office of Sustainability and Clean Energy, Great Plains Institute, and Slipstream, Inc. *State of Wisconsin Clean Energy Plan* (2022). Accessed here.

[96] Cadmus and Apex Analytics. *FOCUS ON ENERGY® Calendar Year 2024 Evaluation Report: Volume II Program Evaluations* (2025). Accessed here.

Bulk Purchasing and Administrative Cost Sharing

Utilities do not engage in bulk procurement of equipment or materials, but the central administrator directly manages Focus on Energy's procurement. All utilities contribute proportionally to a common statewide administrator contract.[97]

PLANNING, REPORTING, AND EVALUATION

Every year, the Public Service Commission must submit a report to the state legislature that lists program expenses, effectiveness, and results. It is responsible for evaluating Focus on Energy once every four years and revising program goals, priorities, and targets as necessary.

[97] Midwest Energy Efficiency Alliance. *Wisconsin Energy Efficiency Standards.* Accessed here.

LOUISIANA CASE STUDY

Program Cancelled

If the program had launched:

- Statewide administrator
- Administered by Aptim and TetraTech
- Implementation was slated for January 1, 2026
- Includes 3 IOUs and 17 co-ops

Portfolio Goals

The program would have required 0.4% energy savings in the first year before increasing to 0.55% by the fourth year.

Statewide Implementation Timeline

The Louisiana Public Service Commission approved the program in January 2024, with an implementation start date of January 2026. The program was cancelled in 2025, reverting EE in the state back to those set for the QuickStart initiative.

In January 2024, the Louisiana Public Service Commission (LPSC) voted to adopt a statewide energy efficiency program run by a third-party administrator. The program would have replaced QuickStart, a utility-run initiative that offered financial incentives for energy efficiency improvements.[98] The new program would have offered weatherization, as well as appliance and building upgrades, particularly to help low-income households and businesses save money. In April 2025, the LPSC voted to cancel the program.[99]

PROGRAM HISTORY

QuickStart was approved by the LPSC in 2013, and utilities began implementing EE programs under the initiative in 2014.[100] The early vision for QuickStart was "to encourage utilities, and their customers, to become more energy efficient and discourage inefficient or wasteful use of energy as quickly as possible rather than wait on fully-vetted rules to be established."[101] However, differences in opinion across various stakeholders in the state, such as the LPSC and electric utilities, created longstanding challenges to formalizing a statewide program. Today, per R-31106, passed in August 2025, Louisiana's EE programs operate under the Louisiana Energy Efficiency Program (LEEP) rules, which maintain those from QuickStart and add an opt-in allowance for industrial customers, a minimum customer incentive amount, and increases to program budgets.[102]

PROGRAM CONTEXT

The largest utilities in the state, Entergy Louisiana, Cleco Power, and the Southwestern Electric Power Company (SEPC), operate energy efficiency programs under LEEP rules. These programs span both the residential and business sectors.

Utility	Programs	Summary
Entergy Louisiana[103]	▪ Residential Solutions Program ▪ Lighting and Appliances ▪ Coolsaver HVAC Program ▪ Income Qualified Program ▪ Small Business Solutions ▪ Large C&I Solutions Program ▪ Public Entities EE Program	These programs provide energy efficiency upgrades, incentives, and technical support to residential customers, businesses, and public entities to reduce energy use, manage demand, and lower energy costs.
Cleco Power[104]	▪ Power Wise EE	Power Wise offers residential and business customers upgrades and incentives for weatherization, HVAC, lighting, and other appliances.
SEPC[105]	▪ Efficient Products Rebates	An online database of rebates offered for various EE products, including HVAC, smart

[98] Hite, Kelly. *Public Service Commission Adopts Old Energy Efficiency Programs* (2025). Accessed here.
[99] Radtke, Pam. *Energy Efficiency Program Killed; Advocates Say Louisianans Will Pay the Price* (2025). Accessed here.
[100] Louisiana Public Service Commission. Docket No. R-31106, In re: Rulemaking to study the possible development of financial incentives for the promotion of energy efficiency by jurisdictional electric and gas utilities (2025). Accessed here.
[101] Ibid.
[102] Ibid.
[103] Entergy. *Louisiana Energy Efficiency Programs.* Accessed here.
[104] Cleco. *FAQs*. Accessed here.
[105] Southwestern Electric Power Company (SWEPCO). *Efficiency Products Rebates.* Accessed here.

Utility	Programs	Summary
		thermostats, EV chargers, and other appliances.

PLANNING, REPORTING, AND EVALUATION

Energy efficiency programs in Louisiana are voluntary and designed by individual utilities (both gas and electric). As part of R-31106, the LPSC will solicit a third-party EM&V evaluator to assess performance and savings across all energy efficiency programs filed under LEEP rules. An annual evaluation must be submitted for each energy efficiency program, meet cost-effectiveness testing requirements, and comply with any other design and operational rules.

SOUTH CAROLINA CASE STUDY

Program Currently Being Scoped

Mandatory statewide study to determine the costs and benefits of an energy efficiency program run by a third-party administrator

Portfolio Goals

Not applicable, as South Carolina lacks both an EERS and a formal statewide energy efficiency program

Statewide Implementation Timeline

The South Carolina Energy Security Act (2025) requires the Office of Regulatory Staff to conduct a study that evaluates the costs and benefits of a statewide energy efficiency program run by a third-party program administrator. As of December 2025, South Carolina does not have a formal energy efficiency program in place.

The South Carolina Energy Security Act of 2025 is the state's most recent and comprehensive energy law, updating and expanding the state's approach to energy planning, utility regulation, and clean energy development. The 2025 Act requires utilities to competitively procure renewable energy and energy storage, with integrated resource plans (IRPs) and DSM portfolios expected to reflect these priorities. Title 58, Chapter 37 of the SC Code is the core statutory framework for energy supply, efficiency, and DSM, including requirements for integrated resource planning, utility EE/DSM programs, and reporting. The Office of Regulatory Staff is required to prepare a 10-year statewide energy assessment and action plan, including recommendations to expand EE/DSM and address barriers. State agencies, schools, and colleges are required to develop conservation plans and have achieved significant reductions in energy use per square foot. New goals are being considered.

PROGRAM HISTORY

South Carolina does not currently have a centralized, statewide energy efficiency program. Each utility is responsible for running its own programs and tracking relevant data. Programs are primarily funded by utility customers.

PROGRAM CONTEXT

Electric and gas utilities in South Carolina are responsible for designing and operating their own energy efficiency programs approved by the South Carolina Public Service Commission. We provide a brief summary of the EE programs offered by Duke Energy and Dominion Energy, the state's two largest IOUs.

Utility	Programs	Summary
Duke Energy[106]	▪ Home Energy Assessment and Direct Install ▪ Smart Saver Home Improvement ▪ EnergyWise Home ▪ Income-Qualified Pilot ▪ EnergyWise Business ▪ Expanded Business EE Incentives	These programs serve residential and commercial customers (as well as Dominion Energy's agricultural offering) in South Carolina and offer various incentives and rebates for EE services and equipment.
Dominion Energy[107]	▪ Neighborhood EE Program ▪ Residential and Small Business Incentives ▪ Reward Hours ▪ Lighting and HVAC ▪ Agriculture Incentives	

PLANNING, REPORTING, AND EVALUATION

Every year, utilities must submit proposed EE/DSM programs (including achieved savings levels, impacts on peak demand and energy savings, and actions to reduce demand), portfolios, and associated budgets to the Public Service Commission. Once every

[106] Duke Energy. *Savings and Solutions*. Accessed here.
[107] Dominion Energy. *Save Energy and Money.* Accessed here.

three years, the Public Service Commission must review utilities' DSM portfolios. The Public Service Commission can order modifications to program budgets, portfolios, or cost recovery if it determines that such changes are in the public interest.

APPENDIX B. RESEARCH AND ANALYSIS FRAMEWORK

STUDY OVERVIEW

The study team utilized a collaborative process to develop and carry out the study, working closely with Missouri stakeholders to refine the research approach and to ensure findings would be useful and actionable. The team initially presented its proposed approach in June 2025. In August, the team held two kickoff meetings to capture emergent research needs; confirm stakeholder priorities for the study; select the eight comparison states; and learn stakeholder perspectives about policy interests, state policy and regulatory context, shortcomings of DSM as it is currently enacted in the state, and barriers to DSM programs. The team held weekly check-in meetings with the funding IOUs and biweekly status calls with the entire stakeholder group to provide updates, share preliminary findings, solicit input and feedback on all processes and deliverables, and more.

During the first kickoff meeting, the research team facilitated a discussion about key drivers for the stakeholders' interest in moving to a different DSM administrative model (Table 22). Stakeholders were presented with five potential policy issues that would drive a decision in Missouri. The study team asked stakeholders to provide their assessment of the top interests of an eventual decision in Missouri. Missouri DSM stakeholders selected (in order of relative importance) promoting administrative cost savings, streamlining governance and oversight, expanding customer access across the state, and achieving energy and demand savings goals (summarized in Table 22). The study team used these policy interests as the foundation for developing our data collection and analysis framework.

Table 22. Missouri Stakeholders' Policy Interests

Policy Interest	Description
Cost Savings	Opportunities to find efficiencies and cost savings moving to a statewide or hybrid model
Governance and Oversight	Maintaining appropriate governance while reducing complexity and work to adhere to oversight structures
Customer Access	Ensuring customers across Missouri maintain (or gain increased) access to DSM programs and services
Achieving Savings Goals	Ensuring energy and demand savings performance and achieving DSM goals

The team also presented a list of 13 potential comparison states and our selection criteria for them, specifically:

- Length of time since statewide model policy adoption
- Implementation model (independent third party vs. hybrid)
- Current approval or implementation status
- Inclusion of electric-only versus dual-fuel programs
- Number of utilities involved, utility structure, and RTO relationship
- Statewide administrator governance model
- Annual energy savings performance

During the discussion about these criteria and the states, the stakeholders proposed adding a fourteenth state for consideration. The conversation revealed consensus about including five states in the comparison group. Stakeholders anonymously voted for additional states. In the end, the group selected a diverse slate of states with widely varying implementation dates, different regulatory structures surrounding their utilities, and various implementation models. The stakeholder group reviewed and confirmed the list of states during the second kickoff meeting.

Table 23 provides a summary of the final eight comparison states that served as the focal points for this research, including how their administrative models shifted, the year that initial legislation was introduced to initiate that shift, and the policy drivers behind each state's decision to move to a different administrative model. See Appendix A for case studies of each state.

Table 23. Comparison State Summary

State	Administrative Model Trajectory	Year Initial Legislative Policy was Passed	Policy Drivers of Administrative Shift
Oregon	Utility administered to statewide nonprofit administrator	1999	Deregulation of electricity markets
Vermont	Utility administered to statewide nonprofit administrator	1999	Deregulation of electricity markets (although VT did not ultimately deregulate)
Wisconsin	State agency administered to statewide nonprofit administrator	2005	Prevent energy efficiency funds from being moved to the state general fund
Maryland	Utility administered to utility administered with centralized statewide branding and review + statewide low-income program (hybrid)	2005	Concerns about rate increases
Massachusetts	Utility administered to utility administered with centralized statewide branding and review (hybrid)	2008	Enhance coordination between utilities, braid state and utility funds, and achieve greater statewide savings
New Jersey	State agency administered to utility administered + statewide low-income program	2018	Increase statewide energy savings and peak demand, and enhance clean energy procurement
South Carolina	Utility-administered, with legislative mandate to explore alternative administrative structures	2025	Manage demand growth and lower bills by meeting with cost-effective resources, and address the underperformance of state IOUs
Louisiana	Utility-administered to statewide administrator approved, then reversed, returning to utility-administered	N/A	Concerns with utility savings performance, desire to expand to non-IOU customers, and aim to reduce administrative complexity and cost

Next, the study team developed and collected stakeholder feedback on a research and analysis framework. They expanded on the four priority policy drivers by creating relevant data collection elements associated with each driver. (Table 24).

Table 24. Research and Analysis Framework and Data Collection Elements

Data Collection Element	Description	Decision Drivers			
		Governance and Oversight	Cost Savings	Customer Access	Achieving Savings Goals
DSM portfolio goals, state energy policy goals/priorities	Statewide and DSM portfolio goals and how goals are structured	X			X
Cost recovery	Cost recovery riders, low-carbon fuel standards, and performance incentives	X			X

Data Collection Element	Description	Decision Drivers			
		Governance and Oversight	Cost Savings	Customer Access	Achieving Savings Goals
Relationship to state (and federal) programs and agencies	How statewide programs coordinate and work with state and federal agencies, and whether this is different with a statewide model versus utility-specific program models	X			X
Core utility obligations	Data collection, management, security requirements, and other obligations of utilities participating in statewide or hybrid DSM		X		
Budget and administrative cost guidance	Budget and administrative cost guidance, spending carveouts (e.g., LMI program structure and proportional investment), cost-share (e.g., munis, co-ops, and gas utilities), and allocation of funds requirements		X		
Bulk purchasing and/or administrative cost sharing	Opportunities for gaining efficiencies with administrative or equipment costs		X	X	
Customer access to programs and services	How different models have impacted customer access to programs and services			X	
Statewide implementation model type and core features	Statewide or hybrid structure, and core facets of that model type	X			
Regulatory structure and stakeholder decision making	Regulatory structure within the state and role of the public utility or service commission (e.g., expectations and authority granted to the public service commission, rules, regulations, and other requirements), as well as the existence of and engagement with the stakeholder working group	X			
Program and resource planning	Integrated resource planning and program planning cycles, timelines, minimum approval requirements, minimum required programs, and relationships with broader utility planning	X			
Statewide implementation timeline	Lead time, processes, and challenges implementing the new DSM program model after legislation passage	X			
Utility participation in the statewide or hybrid DSM model	How different utilities participate in planning and decision-making (e.g., munis, co-ops, and gas utilities)	X			
Reporting and evaluation requirements	Reporting and evaluation requirements change in a statewide model, and mechanisms required to report results at the utility-level	X			

Data Collection Element	Description	Decision Drivers			
		Governance and Oversight	Cost Savings	Customer Access	Achieving Savings Goals
Relationship to demand response programs	How statewide and hybrid DSM models do or do not incorporate DR programs	X			
Legislative bills passed or introduced on DSM-related topics	Other recent (or semi-recent) pieces of legislation introduced or passed related to energy or, more broadly, to energy efficiency or DSM	X			

Finally, the study team translated the research and evaluation framework into a rubric for scoring the extent to which each state's DSM model had a positive, neutral, or negative impact on each driver. As a concluding step, the team used the rubric to arrive at an overall conclusion for each driver: Looking across the comparison states, did switching to a statewide DSM model have an overall positive, neutral, or negative impact on cost savings, customer access, achieving savings goals, and governance and oversight in terms of fostering collaboration and reducing complexity (Table 25)?

Table 25. Scoring Rubric Overview

Drivers of Missouri Decision	Description	Positive	Neutral	Negative
Cost Savings	Opportunities to find efficiencies and cost savings moving to a statewide or hybrid model	Has resulted in cost savings compared with utility-administered programs	Has had no material impact on costs when compared to a utility-administered program model	Has resulted in increased costs when compared to a utility-driven model
Customer Access	Ensuring customers across Missouri maintain (or have increased) access to DSM programs and services	Has increased customer access to measures or program services	Has had no material impact on customer access to measures or program services	Has decreased customer access to measures or program services
Achieving Savings Goals	Ensuring energy and demand savings performance and achieving DSM goals	Has had a positive impact on energy, demands savings, or other energy efficiency metrics	Has had no impact on energy, demands savings, or other energy efficiency metrics	Has had negative impacts on energy, demands savings, or other energy efficiency metrics
Governance and Oversight: Fostering Collaboration	Maintaining appropriate governance while reducing complexity and work to adhere to oversight structures	Has fostered positive collaboration across energy efficiency stakeholders within the state	Has had no impact on the ability of energy efficiency stakeholders to collaborate	Has decreased collaboration across energy efficiency stakeholders
Governance and Oversight: Reducing Complexity		Has reduced complexity in terms of governance and oversight	Has had no material impact on reducing complexity in terms of governance and oversight	Has increased complexity in terms of governance and oversight

DATA COLLECTION

PRIMARY DATA

The study team conducted in-depth interviews with three groups of informants: comparison state industry experts, DSM program implementers, and Missouri DSM stakeholders. We developed a comprehensive set of interview questions to probe each of the data collection elements in the study research and evaluation framework and rubric, and then developed specific interview guides pulling only pertinent interview questions for each type of interview (e.g., our questions for program implementers varied somewhat from our questions for comparison state experts). In total, the team interviewed 11 stakeholders representing comparison states (Table 26). These comparison state interviewees were industry experts with long-standing knowledge of DSM administration within their respective states.

Table 26. Primary Data Collection Activities

Data Collection	Number of Complete Interviews
In-depth interviews with stakeholders in comparison states	11
In-depth interviews with DSM program implementation stakeholders	4
Missouri stakeholder preference interviews	9

To study implementation policies and opportunities for cost sharing, the study team completed interviews with four key DSM implementation stakeholders, including utility program administrators (including natural gas utilities) and non-governmental organization (NGO) and community-based organization (CBO) program implementers.

Finally, the study team conducted preference interviews with Missouri stakeholders following a presentation of our initial findings to gauge their perspectives on whether Missouri should move to a statewide or hybrid model, or maintain the current DSM program model.

Secondary Data

The evaluation team used secondary data for several purposes. First, we collected secondary data to address elements of the research and evaluation framework and to find corroborating data for comparison with state interviews. For instance, we located policy documents and external evaluation reports for the comparison state DSM programs to look for evidence of cost savings.

Second, we relied on secondary data to study enabling legislative language for statewide DSM models. The team identified relevant public documents from comparison states and then cataloged and described their legislative strategies, statutory language, and related rules, parameters, and guidelines.

To study implementation policies and opportunities for cost sharing, the study team utilized their knowledge of related programs (such as building energy codes, weatherization assistance, and federal grants) and national energy trends (including grid decarbonization, increased demand from transportation electrification, buildings, industry, and data centers) to inventory current and potential initiatives, programs, and energy system trends that could support statewide energy efficiency policies in Missouri. The team then reviewed publicly available documents (e.g., regulatory dockets, program manuals, policy analysis literature) to supplement those findings.

Finally, the study team conducted secondary data collection to complete supplemental research tasks requested by Missouri stakeholders. To explore statewide financing programs, we conducted web searches to identify financing models that varied in terms of customer and equipment eligibility, loan types and terms, sources of capital, use of credit enhancements, repayment methods, and other factors. To understand the differential requirements and potential impacts of the two RTOs operating in Missouri, we found and reviewed regulatory dockets, Ameren Missouri and Evergy's IRPs, ISO tariffs, Business Practice Manuals, and other relevant documentation. To assess the potential distributional effects of transitioning to a statewide model, we examined DSM programs and measures offered to Missouri consumers by regulated entities such as Ameren Missouri, Evergy, and Liberty Utilities, as well as by non-regulated entities such as municipal systems and cooperatives. Additionally, we analyzed publicly available datasets detailing energy consumption across sectors in Missouri. To study the economic development and workforce growth impacts of DSM programs, we read evaluation reports and relevant economic impact reporting. Finally, to identify relevant emerging technology programs and innovative program designs, the study team located program descriptions and evaluation reports to catalog these measures and examine the conditions under which they are offered.

STUDY LIMITATIONS

This study was completed between August and December 2025. The study team completed primary data collection through in-depth interviews with a small, targeted sample of representatives from Missouri and the comparison states. In some cases, we interviewed a single person to describe a state's implementation; additional interviewees may have provided additional information. Also, some interviewees spoke about events and information from years or even decades in the past, recalling to the best of their ability. In all cases, the study team sought to corroborate interview data with secondary data as much as possible.

All secondary analyses were based on publicly available data, the breadth and depth of which varied widely across the comparison states depending on each state's priorities, target metrics, and methodologies employed for tracking implementation and evaluating progress. The team was unable to locate reliable quantitative data from older DSM programs in effect during the 1990s and early 2000s, before statewide DSM implementation began. Additional data requests for archived and other non-public data would be required to augment the body of information synthesized in this report.

APPENDIX C. MODEL LEGISLATIVE LANGUAGE

INTRODUCTION

Legislation is a policy tool used by most states to alter the administrative structure of state and utility demand-side management (DSM) programs. In Missouri, the Missouri Energy Efficiency Investment Act (MEEIA) authorizes the state Public Service Commission to approve utility-administered DSM programs.

The MEEIA statute already provides broad regulatory flexibility to adjust the administrative structure of DSM programming in Missouri. The draft legislative language below presents modifications to provide comparatively greater legislative specificity to MEEIA by:

- Strengthening the original language to prioritize acquisition of lower-cost demand-side resources over more expensive supply-side resources,
- Requiring utilities to put out bids for a statewide administrator, subject to review and approval by the commission based upon a finding that the proposals are in the public interest,
- Providing an opt-in for municipal utilities, cooperative utilities, and gas utilities.
- Requiring the commission to engage with the statewide advisory collaborative to support review of DSM plans and performance and other advisory duties as designated by the commission,
- Providing the commission with the option to set requirements for collaborative membership, and
- [Optionally] Establishing a funding minimum threshold for DSM programs.

The proposed language works to address the following broader stakeholder policy concerns:

- **Potential for cost savings, economies of scale, and additional customer access**. The language creates an explicit pathway to accept bids for a statewide administrator of DSM programs and provides a means for gas utilities, cooperatives, and municipal utilities to opt into statewide programming.
- **Potential to enhance energy affordability**. The language allows the regulatory commission to prioritize DSM investments over supply-side investments when they are the least-cost resource.
- **Potential to improve overall portfolio performance and access to programs**. The language provides broad regulatory oversight of DSM programming beyond electric utilities, incorporating additional oversight and guidance from a statewide advisory collaborative.

The model language modifies the 2017 version of the MEEIA legislation,[108] replacing sections with amended language and suggesting sections for repeal. The research team indicates updated language within these newly proposed sections by *italicizing* the additions to the original legislative language. The team provides additional guidance, alternative wording, and alternate structures in footnotes, where relevant. For example, there are footnotes regarding specific funding structures for Missouri DSM programs and minimum investment levels across utilities (funding minimums and structure for DSM programs in Missouri are currently left up to regulators to determine).

[108] Missouri Energy Efficiency Investment Act. *Revised Statutes of Missouri, Chapter 393, section 1075* (2017). Accessed here.

Potential concerns or areas where further adjustments or decision-making are needed, based on Missouri stakeholder feedback, include how the cost-effectiveness of demand-side resources should interact with Missouri IRP processes. The legislation could potentially specify the relationship between DSM planning and IRP processes when working "to prioritize the pursuit of all cost-effective demand-side management strategies over investment in additional supply-side generation resources and associated infrastructure, when demand-side investments are found to be less expensive." Alternatively, the relationship between DSM portfolio planning and IRP processes could be left to the regulators to determine.

LANGUAGE TO UPDATE MEEIA WITH GREATER LEGISLATIVE SPECIFICITY

Repeal sections 393.1075(2), 393.1075(3), 393.1075(4), and 393.1075(12) and to enact in lieu thereof four new sections, to be known as 393.1075(2), 393.1075(3), 393.1075(4), and 393.1075(12), relating to demand side management participation, administration, and regulation, and to read as follows:

393.1075(2). As used in this section, the following terms shall mean:

(1) "**Commission**", the Missouri public service commission;

(2) "**Demand response**", measures that decrease peak demand or shift demand to off-peak periods;

(3) "**Demand-side program**", any program conducted by the utility to modify the net consumption of electricity on the retail customer's side of the electric meter, including but not limited to energy efficiency measures, rate management, demand response, and interruptible or curtailable load;

(4) "**Energy efficiency**", measures that reduce the amount of electricity required to achieve a given end use;

(5) "**Interruptible or curtailable rate**", a rate under which a customer receives a reduced charge in exchange for agreeing to allow the utility to withdraw the supply of electricity under certain specified conditions;

(6) "**Total resource cost test**", a test that compares the sum of avoided utility costs and avoided probable environmental compliance costs to the sum of all incremental costs of end-use measures that are implemented due to the program, as defined by the commission in rules.

*(7) "**Third-party statewide administrator**", any nonprofit, state agency, or other non-utility and non-regulatory commission entity tasked with developing and implementing utility demand side management programs across multiple utility territories.*

*(8) "**Energy utility**", means an investor-owned electric utility.*[109]

Section 393.1075(3) of the Revised Statutes of Missouri is amended to read:

It shall be the policy of the state to expand energy utility investment in and customer access to demand-side management programs, and for gas and electric utilities to prioritize the pursuit of all cost-effective demand-side management strategies over investment in additional supply-side resources and associated infrastructure, when demand-side investments are found to be less expensive.[110] *This will result in more efficient use of existing resources, promote lower energy costs, mitigate the need for new generation and associated infrastructure to meet load growth demands, and assist customers in managing their gas and electric usage to lower energy utility system costs and*

[109] If desired, this definition can be modified to include additional utilities.

[110] If desired, specify the mechanism for assessing cost, such as a study completed in advance of each new cycle filing or as part of the IRP planning process.

customer energy bills, and thus is in the public interest by providing affordability and reliability benefits to Missouri consumers.

In support of this policy, the commission shall:

(1) Provide timely cost recovery for energy utilities;

(2) Ensure that energy utility financial incentives are aligned with helping customers use energy more efficiently and in a manner that sustains or enhances utility customers' incentives to use energy more efficiently; and

(3) Provide timely earnings opportunities associated with cost-effective measurable and verifiable efficiency savings.

Section 393.1075(4) of the Revised Statutes of Missouri is amended to read:

The commission shall permit energy utilities to implement commission-approved demand-side programs proposed pursuant to this section with a goal of achieving all cost-effective demand-side savings. *The energy utilities shall contract, on the basis of competitive bids, with one or more organizations to develop and/or administer the programs through a statewide administrative structure. The utilities may not execute a contract under this subsection without prior approval by the commission and a determination that the alternative administrative model is deemed to offer better opportunities to decrease administrative cost and increase energy savings, improve the quality of services rendered, reduce ratepayer costs, or more effectively serve low-income customers, within a program portfolio that is cost effective overall, as compared to similar program administration by individual energy utilities.*[111]

Recovery for such programs*, regardless of administrator,* shall not be permitted unless the programs are approved by the commission, result in energy or demand savings and are beneficial to all customers in the customer class in which the programs are proposed, regardless of whether the programs are utilized by all customers. The commission shall consider the total resource cost test a preferred cost-effectiveness test. Programs targeted to low-income customers or general education campaigns do not need to meet a cost-effectiveness test, so long as the commission determines that the program or campaign is in the public interest. Nothing herein shall preclude the approval of demand-side programs that do not meet the test if the costs of the program above the level determined to be cost-effective are funded by the customers participating in the program or through tax or other governmental credits or incentives specifically designed for that purpose.

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[111] If desired, funding guidelines could be modified here using the following language as template:

To set a per kWh charge for DSM programming [or a percentage of operating budget]:
The Commission shall require a mandatory charge of XX mills per kilowatt-hour for all consumers including, but not limited to, demand side management programs [or shall require each energy utility to spend XX percent of its annual operating revenues to fund the utility's DSM programs or the utility's share of the statewide DSM programming]. In addition to this mandatory charge, such programs may also be funded, without further appropriation, by other funding as approved by the Commission after consideration of the effect of any rate increases on residential, commercial, and industrial consumers or the availability of other private or public funds, utility administered or otherwise, that may be available for energy efficiency or demand resources.

To establish a public benefit charge to fund DSM programming:
The Commission shall establish an annual public purpose expenditure standard for energy utilities to fund new cost-effective demand side management programming. The charge shall be known as the energy efficiency charge and shall be shown separately on each customer's bill. In addition to this mandatory charge, such programs may also be funded, without further appropriation, by other funding as approved by the Commission after consideration of the effect of any rate increases on residential, commercial, and industrial consumers or the availability of other private or public funds, utility administered or otherwise, that may be available for energy efficiency or demand resources.

The commission may further develop rules to allow municipal utilities, retail electric cooperatives, or gas utilities[112] *to also contract with an approved third-party statewide administrator to develop, implement, and monitor demand side programming.*

Section 393.1075(12) of the Revised Statutes of Missouri is amended to read:

Each *energy utility—or the statewide program administrator—*shall submit an annual report to the commission describing the demand-side programs implemented in the previous year. The report shall document program expenditures, including incentive payments, peak demand and energy savings impacts and the techniques used to estimate those impacts, avoided costs and the techniques used to estimate those costs, the estimated cost-effectiveness of the demand-side programs, and the net economic benefits of the demand-side programs.

The bill also requires the commission to establish a stakeholder process to evaluate the economically achievable energy usage reductions and peak demand reduction requirements, rate adjustments, quantitative performance indicators, and the process for evaluating, measuring, and verifying energy usage reductions and peak demand reductions by the utilities. As part of the stakeholder process, the commission is required to convene a statewide advisory collaborative to study the evaluation, measurement, and verification process for energy efficiency programs and peak demand reduction programs, in order to provide recommendations to the commission for improvements to the programs. The stakeholder advisory collaborative should include at least the following representative stakeholder group members:

a. *Ameren Missouri;*

b. *KCPL/GMO;*

c. *Empire District Electric;*

d. *Staff of the Missouri Public Service Commission;*

e. *Office of the Public Counsel;*

f. *Department of Natural Resources - Division of Energy;*

g. *Low-Income Customers' Group;*

h. *Industrial Customers' Group;*

i. *Affordable Housing Advocacy Groups; and*

j. *Environmental Group.*[113]

The stakeholder process will also extend to demand-side management potential studies and future planning. To ensure cost-effective investments by an electrical utility in energy efficiency and demand response a) are prioritized over potential investments in supply side generation, transmission, distribution, and other supply related utility equipment and resources; and b) identify potential new energy savings opportunities, the statewide advisory collaborative must review each investor-owned electrical utility's portfolio of demand-side management programs. The advisory

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[112] For example, Oregon initially used legislation to establish a statewide energy efficiency model funded by the two major electric utilities but then used regulatory proceedings, beginning in 2002 with NW Natural and focused on revenue decoupling, to "provide funding for public purposes such as low-income bill payment assistance, low-income weatherization assistance, and enhanced energy efficiency measures to be administered by an independent entity" for gas utilities. Order No 02-634. September 12 2002. Accessed here.

[113] These membership guidelines are based on the existing MEEAC charter (https://efis.psc.mo.gov/Document/Display/65234). The study team expanded membership to including an affordable housing advocate based on our bi-weekly conversations with stakeholders for this study.

collaborative will also review electrical corporation integrated resource plans, on at least an every four year basis, and provide guidance to the commission during each approval cycle; or similarly review proposed demand-side management programs as proposed by an alternative administrator approved by the commission. The commission is authorized to order modifications to a proposed demand-side management portfolio, including program budgets, if the commission, after input from the independent advisory committee, determines that doing so would be in the public interest.

APPENDIX D. MISSOURI UTILITY CUSTOMER DEMOGRAPHICS

As part of this study, Missouri stakeholders requested an informal analysis of Missouri's demographics to better understand and identify disparities in access related to income, rural versus urban areas, and other demographic characteristics. The purpose of this assessment is to evaluate the potential distributional effects of transitioning to a statewide model. The study team developed the following guiding research questions to better grasp the distributional effects of a statewide DSM model for all customer types:

- What are the different utility actors in the state, and what are the demographics of the counties they serve?
- What is the volume of electricity consumption across each utility's service territory and by all customer types (residential, commercial, or industrial)?

We developed these questions with the availability of public data in mind, following a brief exploration of the available demographics. The research team conducted targeted web searches of public databases and reports on electricity customer demographics and Missouri's industrial landscape. Based on this information, we created high-level summaries of each utility's service territory. The most granular public data we found was at the county level; thus, our findings do not exactly align with each utility's service territory. Instead, we provide estimates for each metric based on an aggregate of the counties each utility serves, which demonstrate basic demographic and consumption differences across service territories. IOUs, municipal utilities, and electric cooperatives have overlapping service territories in certain areas of the Missouri map, and these estimates, in aggregate, reflect overlapping demographics in our findings.

Missouri has a complex energy utility landscape, with a mix of investor-owned utilities (IOUs), municipal utilities, and electric cooperatives. The Missouri Public Service Commission lists counties, cities, and electric and natural gas utilities that service each city.[114] IOUs operating in the state include Ameren Missouri and its subsidiaries (which offer both gas and electric services), Evergy Missouri and its subsidiaries (which offer electric services), Liberty Utilities and its subsidiaries (which offer both gas and electric services), and Spire Missouri (which offers gas services). There are 104 operating municipal utilities in the state, along with 41 electric cooperatives. Missouri's electric cooperatives get their power from Associated Electric Cooperatives, Inc. (AECI), which generates power at six transmission cooperatives. The Association of Missouri Electric Cooperatives (AMEC) represents these organizations to collectivize decision-making across co-ops. The Missouri Public Utility Alliance (MPUA) brings together the operational municipal utilities in the state with the expressed mission of advancing local control and local benefit.

Utilities in the state serve various demographic groups across their service territories and offer vastly different DSM resources to their customers. Below, we summarize high-level demographics of customers and energy consumption patterns across these utilities' service territories, which may suggest market opportunities or roadblocks to DSM program adoption.

CUSTOMER DEMOGRAPHICS

Missouri has a significant rural population, with an estimated 37% of the state's population residing in rural counties. Rural households across the US spend 33% more of their income on energy than the national average.[115] Notably, Missouri's rural poverty rate (18.4%) is 27.8% higher than its urban poverty rate (14.4%), indicating that rural communities in the state might be more affected by electricity rates or the bill impacts of high-energy-use buildings.[116]

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[114] Missouri Public Service Commission. *Find a Local Utility.* Accessed here.

[115] Tucker, Dylan and Rodney Sobin. *Rural Data Resources for State Energy Planning and Programs* (National Association of State Energy Officials, 2020). Accessed here.

[116] Community Foundation of the Ozarks. *Catalyzing Economic Impact: Rural Missouri.* Accessed here.

Most of the population in the state's urban areas receives power from IOUs.[117] The study team investigated the Missouri counties covered by each utility's service territory and, based on USDA 2023 county-wide rural-urban continuum classifications, determined the share of counties in each service territory that were classified as rural. Table 27 shows each utility's service territory's size, its share of rural counties, the share of these counties' population that is in poverty, and the average median income.

Table 27. Demographics by Utility Service Territory

Utility	Size	Share Rural[118]	Share in Poverty[119]	Median Income
Ameren Missouri	~1.3 million Customers	61%	13%	$61,868
Evergy Missouri	~1.7 million Customers	66%	13%	$62,990
Spire Gas, Inc.	~1.2 million Customers	36%	12%	$67,810
Liberty Utilities	~164,300 Customers	76%	15%	$56,175
Missouri Electric Cooperatives	~780,000 Meters Connected	88%	14%	$58,209
Missouri Municipal Utilities	~889,000 Population Aggregate	77%	14%	$58,888

Note: The column "Missouri Municipal Utilities" encompasses both Columbia Water and Light as well as Springfield City Utilities. These utilities are listed separately because of their significantly larger service territory population compared to other municipal utilities.

Missouri's electric cooperatives and municipal utilities serve more rural counties than IOUs do, although all utilities' service territories share a similar proportion of their populations in poverty. The median income across IOU service territories is generally higher than across electric cooperative or municipal utility service territories, though there are exceptions. For example, the city of Columbia, in Columbia Water and Light's service territory, is an exception with a median income of ~$70,000. The study team did not uncover granular enough data to assess the extent to which shifting to a statewide DSM model would result in lower-income rate payers subsidizing their wealthier neighbors' DSM program participation. Also, residential energy rates in Missouri remain among the lowest in the nation. An important consideration for statewide DSM program design is how bill surcharges for DSM funding may affect customers across each service territory.

MISSOURI'S INDUSTRIES AND ENERGY CONSUMPTION

One way to describe the energy customer base in Missouri is to examine the concentration of employment across industries within the state, as each sector has distinct energy demands. The state's energy demands have corresponded to historical changes in commercial and industrial sectors, and each industry's relevance in the state is related to the labor (employment) it requires. Most (82%) people employed in the private sector in Missouri work in service-providing industries (e.g., management, finance, insurance, healthcare), while only 18% work in goods-producing industries (e.g., manufacturing). The top manufacturing industries by employment are transportation equipment, food, metal products, and machinery. As of 2023, the construction industry is less specialized, and employment in the sector is below the national average.[120] Construction is a crucial sector for energy efficiency, as the weatherization and maintenance of energy-efficient buildings and homes requires technicians, electricians, installers, and construction workers.

[117] US Energy Information Administration. *Missouri State Energy Profile* (2025). Accessed here.

[118] US Department of Agriculture, Economic Research Service. *2023 Rural-Urban Continuum Codes – Documentation* (2025). Accessed here

[119] US Department of Agriculture, Economic Research Service. *Poverty Estimates for United States, States, and Counties, 2023* (2025). Accessed here.

[120] Missouri Economic Research and Information Center. *Industry Research.* Accessed here.

While employment statistics describe energy customers and a potential energy efficiency workforce across the state, another relevant criterion for utilities is the breakdown of energy demand by sector. Missouri has arrived at its current consumption numbers through the historical relevance of its industrial sectors. Missouri serves as a transportation hub across the US due to its central location in the Midwest. Shippers move raw materials, agricultural products, and manufactured goods by rail, river, highway, and air, which requires a tremendous energy input. The state was once a center of coal production, but the industry has since declined significantly. In 1984, 6.7 million tons of coal were produced, while only 150,000 tons were produced in 2024. Despite this historical decline, coal remains a significant contributor to the state's energy generation, accounting for over 57% of the state's net generation in 2024. Missouri typically uses more electricity than it generates and imports from other states on the regional grid. In 2023, the state consumed 469 trillion BTU of energy for residential use, 369 trillion BTU for commercial use, 293 trillion BTU for industrial use, and 551 trillion BTU for transportation use.[121]

The 2019 Open Energy Data Initiative (OEDI) county-wide consumption data shows electricity consumption by county. Using these county-wide estimates, the study team aggregated the residential, commercial, and industrial energy consumption in each utility's service territory (Table 28).

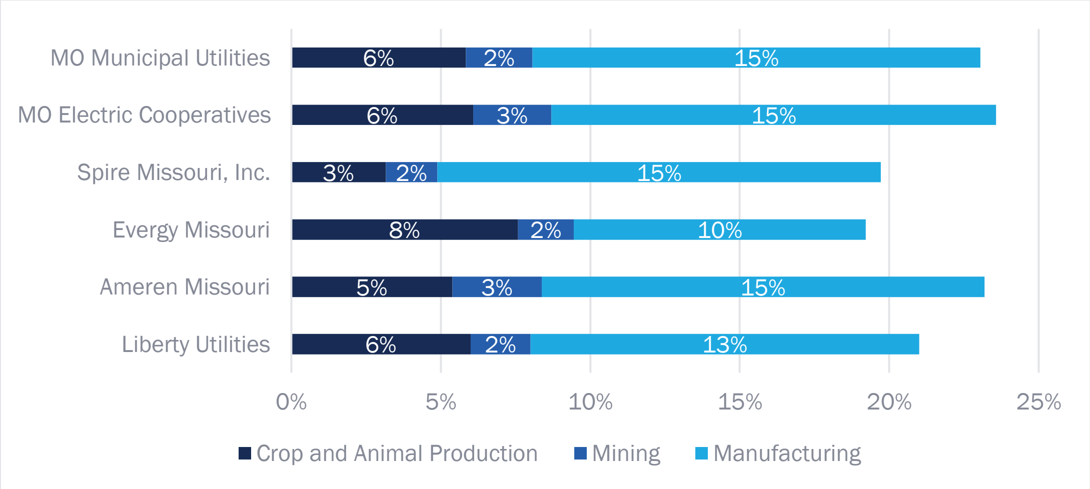
Table 28. Energy Consumption by Utility Service Territory

Utility	Total Annual Consumption (mWh)[122]	Residential Energy Consumption (%)[123]	Commercial Energy Consumption (%)	Industrial Energy Consumption (%)
Ameren Missouri	43,441,545	48%	29%	23%
Evergy Missouri	20,057,926	50%	31%	19%
Liberty Utilities	9,497,237	49%	29%	22%
Missouri Electric Cooperatives	56,694,588	49%	27%	24%
Missouri Municipal Utilities	58,722,289	48%	29%	23%

The OEDI data details each county's industrial consumption stratified by North American Industry Classification System (NAICS) codes. Based on this data, counties across Missouri are using energy in the industrial sector for crop and animal production, mining, and manufacturing. Figure 6 shows the percentage of industrial energy consumption as a proportion of total energy consumption in each utility's service territory. Manufacturing industries encompass a wide range of sectors, including food, leather, wood, paper, coal, chemicals, plastics, metals, transportation equipment, textiles, minerals, and machinery manufacturing.

[121] US Energy Information Administration. *Missouri State Energy Profile* (2025). Accessed here.
[122] The sum of annual electricity consumption in Missouri counties covered by each utility's service territory, calculated with Open Energy Data Initiative County-wide consumption data
[123] Open Energy Data Initiative. *City and County Energy Profiles* (2024). Accessed here.

Figure 6. Prominent Industrial Energy Consumption in Utility Service Territories



There are notable exceptions to the average figures above in both electric co-ops and municipal utilities. Across the service territories of United Electric Cooperative and Webster Electric Cooperative, 60% of their annual energy consumption is residential. In Grundy Electric Cooperative, New-Mac Electric Cooperative, and North Central Missouri Electric Cooperative's service territories, 20% of all electricity consumption is for food manufacturing. Barry Electric Cooperative's service territory uses 42% of its total consumption in fabricated metal product manufacturing.

Eleven municipal utilities use 10% of their energy consumption on crop production. For a handful of municipal utility service territories, a high percentage of their total consumption is from food manufacturing: California (25%), Green City (55%), La Plata (16%), Macon (16%), Marshall (16%), Milan (55%), Perry (18%), Sikeson (17%), and Slater (16%). A staggering 74% of the energy consumption in Potosi's service territory is from leather and allied product manufacturing. Printing is another industry prevalent in many municipal utilities' service territories: Cuba (10%), Linneus (17%), Marceline (17%), and Meadville (17%). In Perry's service territory, 30% of its total consumption is in nonmetallic mineral product manufacturing. Monett and Wheaton's service territories use 42% of their consumption on fabricated metal product manufacturing, and 22% of energy consumption in Ava's service territory is used for machinery manufacturing.

Industrial customers, especially those with higher energy use, are less inclined to join DSM programs. In some states, certain industrial clients have sought exemptions from rate surcharges and program participation requirements. Customers in counties and cities served by municipal utilities or co-ops, where industrial energy consumption is high, might be uninterested in these programs. Additionally, manufacturing clients may already be dealing with declining business due to the recent decline of manufacturing in the state, making them cautious about higher operating costs for demand management.

APPENDIX E. REGIONAL TRANSMISSION ORGANIZATIONS

This section provides additional detail on the operational and data requirements for DR inclusion in each RTO's planning and accreditation process, with a focus on ARC and MEEIA DR pathways. The research team completed this analysis as a supplemental task requested by the Missouri stakeholders.

MISO operates an energy market and a voluntary annual Planning Resource Auction (PRA) for capacity. DR resources can be registered as Demand Response Resources (DRRs) or Load Modifying Resources (LMRs) and bid into energy, ancillary services, and capacity markets to earn capacity or energy payments. Energy efficiency is available for capacity market participation; however, there are currently virtually no energy efficiency participants.[124] MEEIA DR programs are eligible for the capacity market but typically not for energy markets due to data requirements and dispatch constraints. ARCs, on the other hand, generally bid DR resources they aggregate into energy markets.

SPP operates an Integrated Marketplace for energy, but does not have a capacity market. DR primarily participates (1) as an LMR by reducing a Load Responsible Entity's (LRE's) peak demand forecast or (2) as a registered market resource. Compensation is generally through energy market revenues for actual curtailment or via internal utility program incentives or rate structures that help LREs reduce their peak load. Energy efficiency is not available for SPP market participation. MEEIA DR programs are generally used for Resource Adequacy offset. Similar to MISO, ARCs generally bid DR resources they aggregate into energy markets.

Table 29 provides a detailed assessment of MISO and SPP DR participation pathways across a range of attributes, including DR resource accreditation and areas of alignment and divergence across products.

Key operational nuances presented in the table include the following:

- **MISO LMR.** In the MISO RTO, the LMR pathway is integrated into a centralized capacity market (the PRA) and focuses primarily on reliability. MISO imposes a mandatory Resource Adequacy (RA) requirement on Load Serving Entities (LSEs), such as Ameren Missouri, which must secure sufficient capacity, often by registering their MEEIA DR programs as LMRs and offering them into the annual PRA. MISO offers two LMR products: Type 1 and Type 2. Resources registered under Type 1 require a six-hour response, must be deployed once, and must be tested once every three years. Resources registered within Type 2 require a 30-minute response, must deploy for all events, and test once a year. Registering DR as an LMR involves the LSE providing historical performance data and attesting to a minimum four-hour duration and specific notification times (30 minutes or 6 hours), aligned with MISO's June 1–May 31 planning year. MISO performs seasonal compliance audits of this data and mandates real-power testing to verify reliability and capacity value. The program focuses on reliable availability during declared Energy Emergency Alerts (EEA Level 2+). M&V requirements are strictly documented in MISO's Tariff (Attachment TT) and Business Practice Manuals, and require highly granular interval data for verification and to ensure performance is tracked to determine future capacity accreditation, which carries financial penalties for non-performance.
- **MISO DRR.** The DRR pathway in MISO allows for greater market integration, treating DR as an alternative supply resource that participates in both energy and ancillary services markets. Participation in capacity accreditation is optional; a market participant can register the DRR to participate only in energy markets, or they can choose to offer the resource into the PRA to secure capacity payments. For capacity accreditation, the DRR must still adhere to MISO's RA timelines and performance rules, including the minimum four-hour duration requirement. The primary operational difference is that the DRR is dispatched economically by MISO via price signals in the DAM and RTBM (with 10- to 30-minute notification windows), rather than being dispatched manually during an emergency. M&V requirements are rigorous, demanding real-time telemetry and five-minute data for market settlement and

[124] Potomac Economics. *2024 State of the Market Report for the MISO Electricity Markets*. (2025) Accessed here.

performance tracking. While a capacity-accredited DRR receives both monthly capacity payments and energy market revenues when dispatched, MISO's settlement rules prevent double-counting of the capacity value for the same period.

- **SPP RA.** SPP does not administer a centralized capacity market; instead, it uses a resource adequacy construct that imposes a Resource Adequacy Requirement (RAR) on each LRE (such as Evergy) and relies on bilateral contracting and self-supply by LREs to meet their RAR obligations. Under SPP's RA procedures in Attachment AA (Resource Adequacy) of its Tariff, each SPP LRE must complete a workbook each February and August to demonstrate that it has adequate resources available to meet the LRE's RAR for the upcoming summer and winter seasons (February and August, respectively). SPP audits the data as part of a seasonal compliance audit to ensure sufficient documentation and determines whether the LRE is sufficient or deficient in capacity. Deficient capacity determination results in a deficiency payment, a penalty for a capacity shortfall.[125] The RAR is the LRE's seasonal net peak demand plus a planning reserve. Evergy relies on the MEEIA DR program to offset the RAR. As such, the focus of the DR program is on reliably reducing the net peak demand forecast to lower the RAR and avoid financial penalties. M&V and data requirements are not stringently documented, though Evergy relies on best practices in M&V and data for assessment of DR program performance.

- **SPP DDR.** SPP's DDR product treats DR as an alternative supply resource that participates in both energy and ancillary services markets. The value is derived solely from energy market participation. A market participant (an LRE or an authorized ARC for C&I customers) can register the DDR to participate in the Day-Ahead and Real-Time markets, where the focus is on economic dispatch based on market price signals (Locational Marginal Price, or LMP), with typical 10-minute notification windows. The LRE or ARC must ensure compliance with market rules, including the minimum size requirements (100 kW) and real-time telemetry. Reconciliation uses five-minute interval data for market settlement, ensuring the participant is paid for actual energy curtailment. Crucially, per the SPP Tariff (Attachment AA), capacity offered into the market as a DDR is considered "Deliverable Capacity" and is explicitly ineligible to be purchased or counted toward a specific LRE's RAR. The DDR pathway is solely for market revenue, providing no direct capacity value to an individual LRE's RA compliance.

Table 29. MISO and SPP DR Participation Pathway Detailed Assessment

Attributes for Assessment	MISO		SPP	
	Load Modifying Resource (LMR)	Demand Response Resource (DRR)	Resource Adequacy (RA) Load Mod.	Dispatchable DR Resource (DDR)
Market Product Type	Capacity only (non-market dispatch) Cannot be dually registered as an Emergency Demand Resource	Energy, Ancillary Services Optional capacity accreditation. Can earn capacity payments if offered into and cleared in PRA. Cannot be dually registered as an Emergency Demand Resource	Load modification and capacity offset	Energy, ancillary
Minimum Size	100 kW aggregated	100 kW aggregated	Utility-defined	100 kW aggregated
Aggregators (ARC) Allowed?	Yes, per Relevant Electric Retail Regulatory Authority (RERRA) opt-out rules (C&I only).	Yes, per RERRA opt-out rules (C&I only).	No direct market participation; LRE-managed programs.	Yes, per RERRA opt-out rules (C&I only).

[125] Calculated based on the Cost of New Entry (CONE) of a new generation facility.

Attributes for Assessment	MISO		SPP	
	Load Modifying Resource (LMR)	Demand Response Resource (DRR)	Resource Adequacy (RA) Load Mod.	Dispatchable DR Resource (DDR)
MEEIA DR Program Participation Feasible	Yes, currently registered	No, due to data and testing requirements	Yes, currently used to offset RA	No, due to testing and data requirements
Planning/Accreditation Cycle	Annual PRA (June 1–May 31) Accreditation based on historical performance/testing aligned with seasonal peaks.	Annual PRA (June 1–May 31) Accreditation aligned with seasonal peaks (resource scoring quarterly to determine net amount of transmission capacity). Day ahead and real-time	Seasonal Submissions: Feb. 15 (Summer), Aug. 15 (Winter) for the upcoming season.	Day-Ahead & Real-Time via Reliability Unit Commitment (RUC)
Accreditation Process	Performance-Based: Value determined by historical availability/performance during peak hours. Must clear the PRA to be an accredited capacity resource. MISO verifies availability ahead of the operating year.	Performance-Based: Value tied to historical availability/performance during peak hours. Must be offered into and clear the PRA. MISO verifies market/performance compliance.	Forecast-Based Validation: LRE submits the expected peak reduction in the RA Workbook. SPP performs a compliance audit against the LRE RA requirement. No central market auction for accreditation.	Market Registration & Verification: Resource capacity is verified during registration/testing. Resource participates economically in DAM/RTBM; no forward capacity market accreditation needed.
Dispatch Notification	30 min to 6 hours (depending on Type I or II registration); called during MISO emergencies (Energy Emergency Alert (EEA) 2+).	10–30 minutes (economic dispatch via scheduling instructions).	Utility-driven	Typically, 10 minutes in the real-time market.
Duration of Resource	Minimum 4 hours of sustained availability.	Minimum 4 hours per dispatch.	Utility-driven (typically 2–8 hours); must cover utility peak forecast duration.	Follows offer parameters in the market (e.g., 4 hours).
Data Needs	Hourly historical data required for accreditation audit. Hourly or 5-minute interval meter data are required for 2 hours before, during, and after the event for verification. Data submitted via the Demand Side Resource Interface.	Real-time telemetry is required for the MISO control room. Five-minute interval meter data for settlement and performance verification. Requires specific site- and customer-level data aggregation for audit.	Hourly or 15-minute interval data used for internal M&V and establishing Customer Baseline Loads (CBLs). data are aggregated at the program/utility level for RTO submissions (RA Workbook).	Real-time telemetry to the SPP control room. Five-minute interval meter data required for settlement and performance verification, aggregated for market participation.
M&V Requirements	MISO Attachment TT & Manual 11; hourly data for general compliance, 5-minute interval data for resources with response time of less than 1 hour under new performance-based accreditation reform, specific baseline methodologies (CBL, statistical), subject to MISO audits. Mandatory real-power tests.	MISO Attachment TT & Manual 11; requires 5-minute interval data, strict baseline methods, and real-time telemetry.	Utility/State-specific M&V (IPMVP); data used to verify RA Workbook submissions & peak load reduction.	Performance-based testing/verification; data required to settle market transactions.

Attributes for Assessment	MISO		SPP	
	Load Modifying Resource (LMR)	Demand Response Resource (DRR)	Resource Adequacy (RA) Load Mod.	Dispatchable DR Resource (DDR)
Test Events	Self-test at registration Annual MISO-initiated tests	Self-test at registration Annual MISO-initiated tests	Utility determines tests to support RA claims. SPP is introducing capability/operational tests for resources claiming capacity credit.	Capability and annual operational tests (or successful EEA deployment).

Sources: https://sppviewer.etariff.biz/tariff

Integrated Marketplace Draft 13-Final. https://www.spp.org/spp-documents-filings/?id=20870

https://cpowerenergy.com/wp-content/uploads/2022/12/MISO-BPM-026-Business-Practices-for-DR.pdf

https://spp.org/documents/58597/attachment%20aa%20tariff.pdf

FERC Electric Tariff Modules – Module E-1. Resource Adequacy 31.0.0

https://www.spp.org/documents/74369/20250721_order%20accepting%20tariff%20revisions%20subject%20to%20condition%20-%20expediated%20resource%20adequacy%20study_er25-2296-000.pdf

https://www.spp.org/documents/63847/spp%20oatt%20business%20practices%2020210120.pdf

https://www.spp.org/documents/71804/2024%20spp%20june%20resource%20adequacy%20report.pdf#:~:text=The%20Transmission%20Provider%20reviews%20and%20validates%20the,determine%20whether%20each%20LRE%20meets%20the%20RAR.

https://cdn.misoenergy.org/20250130%20DR%20ER%20Reforms%20Workshop%20Item%2002%20MISO%20Presentation675317.pdf

IMPACTS ON RTO INPUTS FOR DSM RESOURCES

The table and analysis above show that the RTOs place differential technical and data requirements on DR resources, and those requirements vary by product. The feasibility of DR participation in the wholesale markets is determined by available products and associated data, dispatch notification, dispatch duration, and M&V requirements. EE DSM resources are precluded from participation, while DR MEEIA resources have a limited pathway in SPP as an RA resource and a more flexible pathway in MISO as a capacity resource. Respective RTO requirements for resource accreditation are tied to specific ISO planning cycles with different timelines that do not align with the calendar-year MEEIA program cycles. The two RTOs also differ in their requirements for data and acceptable M&V practices.

IMPACTS ON UTILITY RESOURCE ADEQUACY OUTCOMES

The contrasting RTO market structures have a significant impact on how Ameren Missouri and Evergy are able to meet their RA obligations. MISO's capacity market provides a single platform for verifying and committing all available capacity in a zone to meet system needs. Whether capacity is registered into the market by Ameren Missouri or an ARC, it is removed from Ameren Missouri's baseline obligation. In contrast, such a centralized mechanism is absent from the SPP. As such, market-registered DDRs do not automatically provide RA benefits to the LRE, such as Evergy, in the same integrated way. DR resources registered in the wholesale market are generally treated as an alternative form of supply for the energy market, and their capacity is considered available for the entire SPP Balancing Authority area, and do not count toward the LRE's RA requirement. SPP Tariff language explicitly excludes this capacity from being used by an individual LRE to meet their specific local RAR.

However, SPP is proposing to change how demand resources, including DR, participate in the market. SPP's Revision Request 703 (RR 703) aims to ensure that DR participates more visibly in SPP.[126] SPP is proposing that DR must be

[126] RR703 https://www.spp.org/spp-documents-filings/?id=21069

registered with SPP if it is called due to an SPP need. SPP expects to file this proposal at FERC in February 2026 for implementation in the 2027/2028 planning year. RR703 introduces two new market mechanisms:

1. **Market Registered Demand Response (MRDR):** Intended for participation in the energy and ancillary services markets.

2. **Reliability Registered Demand Response (RRDR):** A capacity/reliability product available during Conservative Operations or EEA 2+ events

These new products are intended to offer stakeholders multiple mechanisms for participation and will positively impact how entities can comply with the RAR by making DR eligible for formal market and reliability accreditation. RR 703 also introduces a more formalized and stringent way for DR that offers new mechanisms for RA credit, including:

- More formalized rules around notification windows: New reliability products feature either one-hour or six-hour notification lead windows.
- Specific deployment triggers: Instead of being deployed purely based on utility economic needs or peak forecasts, the new products would be deployed explicitly for reliability, with triggers becoming RTO-controlled events (such as conservative operation advisories or any level of EEA alert, rather than utility-managed events).
- Performance-based accreditation: The new proposed rules mandate robust performance requirements for accreditation, including a three-year lookback for performance during conservative operations or EEA hours.
- Mandatory testing: The new products include a requirement for mandatory capability and annual operation tests.

These changes, if adopted, will lead to greater convergence between SPP and MISO in how DR is treated relative to RA.

APPENDIX F. STATEWIDE DSM FINANCING PROGRAMS

INTRODUCTION

The research team completed a supplemental task to review and identify energy financing options for statewide programs. Specifically, we completed the following:

- Reviewed and summarized the existing energy efficiency (EE) financing programs available in Missouri, which largely include two key program types: PAYS® (or Tariff-On-Bill models) and Property Assessed Clean Energy (PACE models). Among these existing financing programs, we summarize key attributes including:
  - Customer Eligibility: Who qualifies for the financing
  - Equipment Eligibility: What types of equipment or projects qualify
  - Loan Types and Terms: Including the term-length of loans, fees, coPAYS®, and interest rates
  - Repayment Party: Who is responsible for repaying the loan (i.e., does the loan stay with the customer or the meter/building owner)
  - Sources of Capital: What is funding the financing offering
  - Repayment Method: How is the loan repaid (e.g., through the utility bill, as a separate bill, or via property taxes)
  - Partnerships: Who is partnering to bring the financing mechanism to the market
  - Administrator: Who is administering the financing
- Evaluated if and how these existing EE financing programs might function as statewide programs, based on lessons learned from current deployments of successful statewide financing programs in other states.

Finally, we provide recommendations for how a statewide finance program could complement a statewide DSM program model.

METHOD

Our analysis was a qualitative review of existing literature on energy efficiency financing, websites, and evaluations of Missouri's utility-offered PAYS® programs, coupled with subject matter expertise in EE financing. The research team conducted targeted Google searches and site-specific searches of Missouri utility websites, the Missouri Public Service Commission website, and EE financing-specific websites, including PACE Nation, ACEEE Financing, California GoGreen, and the Connecticut Green Bank website. We reference all sources throughout this section.

EXISTING EE FINANCING PROGRAM TYPES AND ATTRIBUTES IN MISSOURI

The two main EE financing programs currently offered in Missouri are known as PAYS® and PACE.

Pay As You Save PAYS® Model: PAYS® is a utility-lending offering to help consumers, largely residential, pay for energy efficiency upgrades in their homes. Under this model, the utility is heavily involved in all stages of the project and financing. The utility hires a vendor to conduct an energy audit of homes to identify cost-effective EE upgrades. If a project qualifies for financing, the customer pays for it through a monthly payment on their utility bill. Customers must pay a copay amount if the project's costs exceed 80% of the estimated post-savings upgrade savings over 80% of the measure's life. It is funded through an on-bill tariff, and the repayment is tied to the meter, not the customer. The approach is intended to result in a neutral or net-positive cash flow for consumers.[127] PAYS® is currently offered to Ameren, Evergy, and Spire customers in Missouri. PAYS® has not yet been offered by any Missouri rural electric co-ops or municipal utilities,[128] although it is used by co-ops and smaller utilities around the country.[129]

We searched for evaluations of the PAYS® programs in Missouri for any lessons learned from current deployments via Google, Utility Websites, and the Public Service Commission website. The most recent (since 2020) public evaluation reports providing lessons learned are mostly from evaluations of Ameren Missouri's PAYS® program.[130],[131] From these reports, we discovered the following:

- **Ameren Missouri has been struggling to meet savings and participation goals**: The utility's program began in 2021 and struggled with meeting participation and savings projections. In Program Year 2024, the program achieved only 8% of its annual net MWh savings goal, underperforming significantly compared to other residential programs.
- **The attrition rate is high**: The participation process has several steps, which can take time to move through, and attrition can occur at each stage. Enrollees in the PAYS® Program progress through four tiers of program participation. In Tier 1, a contractor conducts an initial safety screening and qualifies the home for an energy audit; in Tier 2, an energy audit is conducted; in Tier 3, a report with proposed measures to install is provided; and in Tier 4, measures are installed, and payment for the project begins via monthly utility bills. In 2023, the attrition rate from Tier 1 to Tier 4 was 94%.
- **The copay is a large barrier to participation when it is larger than $1,000**: Most participants (54%) who dropped out of the program after Tier 3 declined the copay offer. When projects do not meet the criteria for 100% financing, they require a customer copay. Evaluation results showed that participants were far more likely to complete retrofits with PAYS® if their copay was under $1,000.

Property Assessed Clean Energy (PACE) Model: PACE is a financing tool that allows property owners to retrofit their properties with energy efficiency and renewable energy improvements at no upfront cost. PACE is largely conducive to commercial and multifamily properties. PACE involves the local government's tax authority, which issues special bonds to finance the energy upgrades and then collects repayment through a special assessment on the building's property taxes.[132]

There are currently four commercial programs and three residential PACE programs operating, including the Missouri Clean Energy District (MCED), YgreneWorks, Missouri Energy Savings Program (MO-ESP), and Set the PACE St. Louis.[133] The MCED services communities across the state; counties opt in, and access to PACE and other programs also varies across communities.[134] With the expansion of PACE financing and concurrent criticism from consumer advocates, the Missouri state legislature passed the Property Assessment Clean Energy Act of 2021 to ensure greater standardization of assessment contracts and terms.[135] Rather than a clean energy development board collecting assessments and passing them on to government authorities, the city or county collector can be the only authority collecting repayments. Under this law, clean energy development boards are subject to oversight by the Division of Finance, and residential property owners have the right to cancel PACE Assessment contracts within three days of signing.

Green banks and other financiers provide capital for PACE projects, while local governments collect payments. The capital provided covers the total upfront cost of an energy or resilience upgrade, and the customer repays the

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[127] Renew Missouri. *Pay As You Save*. Accessed here.
[128] Ibid.
[129] Ibid.
[130] ADM Associates, Inc. *Portfolio Summary Report* (2025). Accessed here.
[131] Opinion Dynamics. *Ameren Missouri - Program Year 2023 Annual EM&V Report Volume 1: Portfolio Impact Summary* (2024). Accessed here.
[132] Renew Missouri. *Renew Missouri's Guide To All Things Renewable & Energy Efficiency In the Show-Me State*. Accessed here.
[133] PACE Nation. *PACE Programs*. Accessed here.
[134] Missouri Clean Energy District. *MCED Member Community*. Accessed here.
[135] Missouri State Legislature. *HB 697: Property Assessment Clean Energy Act* (2021). Accessed here.

investment over the useful life of the equipment, typically with a longer-than-usual payback period. Missouri, along with California, Florida, and Ohio, has residential PACE programs that largely cover projects in single family homes. Consumer advocates have expressed concern about the resulting high tax bills, the risk of foreclosure, and issues with refinancing when property owners move or sell their old property.[136]

Table 30 summarizes these financing program types and attributes in Missouri.

[136] US Environmental Protection Agency (EPA). *Commercial Property Assessed Clean Energy* (2025). Accessed here.

Table 30. Missouri Existing EE Financing Program Types and Attributes

Attributes	Ameren Missouri PAYS®®[137]	Evergy Fast Track PAYS®[138]	Evergy Whole Home PAYS®[139]	Spire PAYS®[140]	PACE (Missouri Statewide)[141]
Customer Eligibility	Residential electric customers; Single Family and Multifamily	Residential; largely Single Family or Multifamily ≤4 units	Income-based; Residential; largely Single Family or Multifamily ≤4 units	Residential customers; Single Family and Multifamily	Commercial and Residential (tends to be more conducive to commercial and multifamily properties
Equipment/Project Eligibility	Multiple equipment types; average monthly costs (monthly PAYS® Charge) must be no more than 80% of estimated average monthly bill savings	HVAC ENERGY STAR® equipment; average monthly costs (monthly PAYS® Charge) must be no more than 80% of estimated average monthly bill savings	Multiple equipment types, but must be ENERGY STAR equipment; average monthly costs (monthly PAYS® Charge) must be no more than 80% of estimated average monthly bill savings	HVAC, Attic insulation, Air sealing, Duct sealing, Water heaters, Smart thermostats, 80/20	EE and Renewables
Financing Terms	3% service fee, Co-pay if project >80% cost threshold;	3% service fee, Co-pay if project >80% cost threshold, not technically a loan, 15-year loan terms	3% service fee, Co-pay if project >80% cost threshold, not technically a loan, 15-year loan terms	3% service fee, Co-pay depending on the anticipated costs and savings, 15-year loan terms	Varies, can be up to 20 years, and up to 9% interest
Repayment Party	Meter	Meter	Meter	Meter	Meter
Sources of Capital	On-Bill Tariff	On-Bill Tariff	On-Bill Tariff	On-Bill Tariff	Bonds
Repayment Method	On-Bill	On-Bill	On-Bill	On-Bill split between Spire Gas and Electric Utility bills	Property Tax/Lien
Partnerships	Contractor Network	Contractor Network	Contractor Network	Contractor Network	Local Government Tax Authorities; Contractor Network
Administrator	Utility oversees multiple third-party administrators & implementers: Franklin Energy administers, and utility implements	Utility likely oversees implementer (vendors unknown)	Utility likely oversees implementer (vendors unknown)	Utility likely oversees implementer (vendors unknown)	City of St. Louis, Ygreneworks, Missouri Clean Energy Funding LLC, Missouri Energy Initiative (MEI)
Application/ Approval Party	Implementer	Program Implementers; HVAC contractors	Implementer	Implementer	Retail Installment Contracts

[137] Ameren Missouri. *Pay As You Save*. Accessed here.
[138] Evergy. *HVAC Upgrades Made Affordable*. Accessed here.
[139] Evergy. Pay As You Save Terms and Conditions. Accessed here.
[140] Spire Inc. *Pay As You Save®*. Accessed here.
[141] Missouri Energy Initiative. *2024 Annual PACE Program Review*. Accessed here.

PAYS® IN OTHER STATES

On-bill financing has been successful nationwide, especially for commercial customers, but largely through utility-run programs. Attempts to create a statewide program with on-bill repayment through utilities are cumbersome, given that a statewide entity often needs to work with each utility company separately, and the legal, technological, and administrative hurdles involved take a long time to overcome. For example, California has been attempting this since 2014 and still has not been successful in overcoming these hurdles with any of the utilities across the state, so their financing offering remains off-bill. Within on-bill models, key variants include whether the utility or a private party is at risk if payments are not made; whether the repayment is attached to the meter and therefore extends beyond the borrower; and whether the capital for the projects comes from the utility or a private party.

FINANCING PROGRAM TYPES AND ATTRIBUTES IN OTHER STATES

Beyond PAYS® and PACE, some states have had success offering statewide financing to both residential and commercial customers through a more traditional loan model that is repaid off-bill. In these cases, a separate entity from the DSM program administrators administers the financing. If Missouri wanted to create a statewide financing offering, it would need to identify or create a separate entity to administrate it. Below, we describe two key states that have successfully created statewide financing for EE through either a State Energy Office (SEO) Revolving Loan Fund (RLF) or a Green Bank.

REVOLVING LOAN FUNDS: CALIFORNIA GOGREEN STATEWIDE FINANCING CASE STUDY

Generally speaking, a state's economic development agency issues grant awards to establish RLFs that provide access to capital, largely as gap financing, to assist business and job growth. Recipients of RLF loans are required to develop a plan that demonstrates how the funding meets economic development goals and how they will administer the funds to achieve them. When applying, potential borrowers must demonstrate that they would otherwise not have sufficient credit to finance the activity for its planned, successful operation and that they require these loans for operating expenses.

California has successfully established statewide financing for EE through a State Energy Office (SEO) RLF. "Many SEOs administer RLFs, from which loans are made to end users for eligible energy upgrades. RLFs are pools of capital from which funding is recycled via repayment of the loans by customers and then re-loaned for new projects."[142] California's program is known as GoGreen Financing or GoGreen.[143] The program is administered by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), a state agency housed in the State Treasurer's Office. GoGreen is offered to small businesses, affordable multifamily properties, and residential customers.

GoGreen offers a credit enhancement in the form of a loan loss reserve (LLR), available to participating finance companies (or lenders). The loss reserve aims to mitigate finance companies' risk by providing them with access to loss reserve funds in the event of a default. The credit enhancement encourages finance companies to offer more attractive terms, such as lower interest rates, larger loans, or longer repayment terms. It also allows finance companies to approve financing for a broader base of borrowers than they otherwise could (e.g., small businesses with only a few years of operating history or residential homeowners with a low FICO score). The program connects California property owners and renters with lenders to finance their energy efficiency projects. The program enrolls both statewide and regional lenders.

[142] Henner, Nick. *Energy Efficiency Program Financing: Size of the Markets* (ACEEE, 2020). Accessed here.
[143] State of California. *GoGreen Financing™*. Accessed here.

To attract capital, the program established an LLR for enrolled lenders who offer loans for energy efficiency upgrades. The LLR can cover 90% of capital losses resulting from charge-offs on enrolled loans. The intent is to help mitigate lender risk and, ideally, lead to reduced capital costs for borrowers, improved terms, and broader market coverage in the low-to-moderate-income (LMI) and low FICO-score segments.[144] Interest rates charged by GoGreen lenders range from 3.48% to 8.12%.[145]

GoGreen has a target to allocate approximately one-third of the total credit enhancements to serve LMI single-family residential loans. This is supported through two design features:[146]

- The LLR contribution for LMI borrowers is set at 20% of the loan principal amount, while it is set at just 11% for other borrowers (to provide a stronger risk mitigation tool for the LMI market).
- Borrowers with FICO scores as low as 580 will be considered for loans. However, for applicants with FICO scores between 580 and 640, the lender must verify the borrower's income as part of the underwriting process. Enrolled lenders are responsible for developing their own origination processes.

The program also includes an important investment in contractor training and marketing outreach.

GREEN BANKS: CONNECTICUT GREEN BANK STATEWIDE FINANCING CASE STUDY

Green Banks can be public, quasi-public, or nonprofit financing institutions that use capital from various sources to pursue clean energy projects. Local policymakers primarily use these banks to deliver projects for economic or public benefit that would not be operationalized by other financial markets. Green banks often support lenders in serving underserved markets. They can be established in several ways: through legislative authority granted by local or state agencies, through public or private funding, or through nonprofit organizations. Banks can source funding from federal, state, or private grants and bonds, and they can even use utility ratepayer surcharges.

The Connecticut Green Bank is a quasi-public agency. As the nation's first statewide "green bank," the Connecticut Green Bank leverages public and private funds to finance energy efficiency and clean energy projects for residential and nonresidential customers. Similar to the GoGreen model in California, the Green Bank partners with lenders throughout the state to offer energy-specific financing. They partner with private-sector investors to provide low-cost financing for energy efficiency and clean energy measures across the residential, commercial, industrial, institutional, and infrastructure sectors. The Green Bank offers traditional loans to all customer sectors and PACE to commercial customers. In Connecticut, green banks can dedicate funds and provide administrative support to utility DSM programs.

Table 31 below summarizes the key attributes of the California GoGreen and Connecticut Greenbank statewide finance offerings.

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[144] Credit scores are calculated and ranked based on FICO proprietary criteria.
[145] California Office of the State Treasurer. *Updates from the California Hub for Energy Efficiency Financing (the Hub)*. Accessed here.
[146] California Office of the State Treasurer. *California Alternative Energy and Advanced Transportation Financing Authority Regulations Implementing The Residential Energy Efficiency Loan Assistance Program* (2025). Accessed here.

Table 31. Example Statewide Financing Programs

Attributes	CA GoGreen Statewide[147]	CT Greenbank Statewide[148]
Model type	State Energy Office (SEO) Revolving Loan Funds (RLF)	Nation's first state-level Green Bank
Website	https://www.gogreenfinancing.com/	https://www.ctgreenbank.com/
Financing Types Offered	Loan-Loss-Reserve, Credit Enhancement for Loans through lenders	Loan-Loss-Reserve/Credit Enhancements for Loans through local community banks (Smart-E Loans) and PACE (C-PACE) models
DSM Programs	Complements/Partners with DSM programs throughout the state (mostly HVAC and water heating programs), customers can also take a loan without a DSM Program	Complements/Partners with DSM programs throughout the state (mostly HVAC and water heating programs),
Customer Eligibility	Residential, Small Business, Affordable Multifamily	Residential and C&I for loans, Commercial for PACE
Equipment/Project Eligibility	80% of the loan must go towards measures that are listed on CA's EE measure list and/or clean energy, such as solar + battery storage and EV charging	Mostly tied to DSM programs for loans, such as HVAC/Heat pump programs; C-PACE covers almost all types of EE and clean energy projects
Financing Terms	Interest rates vary by lender and range from 3.48% to 8.12%; loan repayment terms are typically up to 10 years	For residential loans, interest rates vary by lender and range from 2.99% to 6.99% (lower rates offered to LMI customers), and repayment terms are 5, 7, and 10 years; For C-PACE, interest rates range from 4.5% to 6.45% depending on the term and loan amount, and repayment terms range from 5 to 25 years
Repayment Party	Individual/Customer	Individual/Customer for Loans, Property Owner for C-PACE
Sources of Capital	Public (CPUC ratepayer funded) and Private (Lenders)	Public (ratepayer and taxpayer) and Private (individuals, credit unions, banks, bond buyers)
Repayment Method	Off-Bill	Off-bill for Loans, Property Tax/Lien for C-PACE
Partnerships	Contractor Network, utility-specific DSM programs throughout the state	Contractor Network, utility-specific DSM programs throughout the state
Administrator	California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), a state agency housed in the State Treasurer's Office	The Green Bank was established through Public Act 11-80 as a quasi-public agency that superseded the former Connecticut Clean Energy Fund

[147] State of California. *GoGreen Financing™*. Accessed here.
[148] Connecticut Green Bank. Accessed here.

CONCLUSIONS AND RECOMMENDATIONS

- **Conclusion:** The two main EE financing programs offered in Missouri now are PAYS® and PACE.
- **Conclusion:** Shifting PAYS® from utility-run to a statewide on-bill repayment program would likely be very challenging to administer.
  - **Recommendation:** Leave the existing utility-run structure for Missouri PAYS® intact, independent of any statewide EE model adopted in the state.
- **Conclusion**: The PACE model is already offered statewide and could be a good offering to promote alongside commercial and multifamily major retrofit projects. Commercial markets are more familiar with the property tax lien structure than residential markets.
  - **Recommendation:** We recommend further investigation into whether and how PACE can complement a statewide DSM program strategy, including study of the following key questions:
    - Who can and will administer the financing statewide?
    - Is a new statewide entity needed for administration?
    - Which customers should the state target, in terms of sector (e.g., commercial, multifamily, residential single family), income levels, and/or types of measures or projects?
    - How will customers pay the loans?
  - **Recommendation:** Consider a mix of loans and C-PACE options, similar to the Connecticut Green Bank.

APPENDIX G. EMERGING TECHNOLOGIES AND INNOVATIVE PROGRAM DESIGNS

As part of this study, Missouri stakeholders requested a supplemental exploration of emerging technologies and innovative program designs that could integrate into a statewide DSM portfolio. Emerging technologies are often considered high risk for utility companies to include in DSM programs, given customer and trade ally lack of familiarity and higher cost. Innovative program designs may also require more risk than traditional utility rebate programs. Nonetheless, emerging technologies and new program designs may achieve energy savings or provide other customer benefits that utilities and states deem worth the additional risk.

As part of the research and evaluation framework, the research team developed the following research questions to guide the exploration:

- What are promising emerging technologies or innovative program designs for DSM programs?
- What barriers to adoption hinder emerging technologies or innovative program designs in other states?
- What enables programs with emerging technologies or innovative program designs in other states?

The research team conducted targeted national web searches for emerging technologies and innovative program designs and drew on its expertise to identify potential technologies and program designs for Missouri. Researchers focused their web searches on trustworthy sources of information, including the websites of utilities, regional energy efficiency organizations, state energy research agencies, and market transformation programs. Because the team limited web searches to such sites, our findings are not comprehensive and do not reflect all possible technologies, programs, or program sponsors.

The team excluded technologies and program designs already in use in Missouri. To ensure the web searches would yield technologies and programs Missouri could reasonably deploy in the near future, we also excluded technologies being tested but not yet proposed or used for DSM programs anywhere in the United States (e.g., technologies being studied for their energy-saving potential but not yet piloted or deployed by a DSM or EE program). Finally, researchers asked about emerging technologies and program innovations during interviews with three of the comparison state representatives; the remaining states either did not have statewide DSM programs currently being implemented or did not have time to discuss these topics during their interviews.

EMERGING TECHNOLOGIES

The research team identified 15 emerging technologies Missouri stakeholders could consider, including residential and commercial technologies. Program sponsors with a footprint in comparison states are bolded.

Table 32. Potential Emerging Technologies for Missouri Programs

Sector	Type	Technology	Program Sponsors
Commercial	HVAC; Heat Recovery	Very High Efficiency Dedicated Outside Air System (i.e., Very High Efficiency HVAC)	**Northwest Energy Efficiency Alliance (NEEA);**[149] Institute for Market Transformation;[150] ComEd[151]

[149] See NEEA's main site at [Market Transformation Portfolio - Northwest Energy Efficiency Alliance (NEEA)]() or their BetterBricks site at [Very high efficiency DOAS - BetterBricks]()

[150] Institute for Market Transformation (IMT). *Very High Efficiency HVAC.* Accessed [here]().

[151] ComEd. *ComEd Quarterly Report-Out: Electrification Update* (2025). Accessed [here]().

Sector	Type	Technology	Program Sponsors
Commercial	Fan Systems	Efficient Fans	**NEEA**[152]
Commercial	Water Heating	Food Service Heat Pump Water Heaters (HPWHs)	California Market Transformation Administrator (CalMTA)[153]
Commercial	Water heating	Multifamily Central Heat Pump Boiler System	TECH Clean California[154]
Commercial	Heat Recovery	Building and Wastewater Heat Recovery	New York State Energy Research and Development Authority (NYSERDA)[155]
Commercial	Lighting	Luminaire Level Lighting Controls	**Mass Save;**[156] Ameren Illinois (AIC);[157] **NEEA;**[158]; Minnesota Efficient Technology Accelerator (ETA);[159] ComEd[160]
Commercial	Lighting; HVAC	Networked lighting Controls with HVAC Integration	Seattle City Light[161]
Commercial	Building Envelope	Window Attachments and Replacements	CalMTA[162]
Commercial; Residential	HVAC	Large Scale Thermal/Community/Ground Source Heat Pumps	NYSERDA;[163] **Eversource**[164]
Residential	Cooking	Induction Cooktops and Ranges (with and without Battery Backup)	CalMTA;[165] **Mass Save**[166]
Residential	Generation; Storage	Battery Storage Paired with Solar Photovoltaic Systems	**Energy Trust of Oregon**[167]
Residential	Water Heating	120 Volt HPWHs	TECH Clean California;[168] Peninsula Clean Energy[169]
Residential	HVAC	Room/Window/Micro/Portable Heat Pumps	CalMTA;[170] NYSERDA and collaborators;[171] TECH Clean California;[172] ComEd[173]
Residential	Smart Meters; IoT Devices	Smart Metered Connected Devices	ComEd[174]

152 Northwest Energy Efficiency Alliance (NEEA). *Market Transformation Portfolio.* Accessed here.
153 CalMTA. *Foodservice Water Heating Systems Market Transformation Advancement Plan* (2025). Accessed here.
154 TECH Clean California. *Packaged Central Heat Pump Boiler Project: Small Planet Supply* (2023). Accessed here.
155 NYSERDA. *Planning for Resource Efficient Decarbonization* (n.d.). Accessed here.
156 Mass Save. *Upgrade Existing Lighting.* Accessed here.
157 Ameren Illinois Company (AIC). *Ameren Illinois Luminaire Level Lighting Controls (LLLC) Market Transformation Initiative Business Plan* (2023). Accessed here.
158 See Market Transformation Portfolio - Northwest Energy Efficiency Alliance (NEEA) and Luminaire Level Lighting Controls Overview - BetterBricks.
159 Minnesota ETA. *Luminaire Level Lighting Controls Market Transformation Plan* (2023). Accessed here.
160 ComEd. *Networked Lighting Controls*. Accessed here.
161 Seattle City Light. *Networked Lighting Controls Toolkit* (n.d.). Accessed here.
162 CalMTA. *Commercial Replacement and Attachment Window Solutions Market Transformation Advancement Plan* (2024). Accessed here.
163 New York State Energy Research and Development Authority (NYSERDA). *Large-Scale Thermal.* Accessed here.
164 Eversource. *Geothermal Pilot Reference Guide.* Accessed here.
165 CalMTA. *Induction Cooking Market Transformation Initiative Plan* (2024). Accessed here.
166 Mass Save. *Electric Cooktops*. Accessed here.
167 Energy Trust of Oregon. *The Future of Homebuilding Has Solar and Storage* (2025). Accessed here.
168 TECH Clean California. *Statewide 120-Volt Heat Pump Water Heater Field Study* (2023). Accessed here.
169 Peninsula Clean Energy. *120-Volt Heat Pump Water Heater Pilot* (2025). Accessed here.
170 CalMTA. *Room Heat Pumps Market Transformation Initiative Plan* (2024). Accessed here.
171 Building Energy Exchange. *How and When? Clean Heat and Climate-Friendly Homes for All* (2025). Accessed here.
172 TECH Clean California. *Fast Path to Clean Indoor Air 350 Bay Area* (2024). Accessed here.
173 ComEd. *ComEd Quarterly Report-Out: Electrification Update* (2025). Accessed here.
174 ComEd. *Smart Meter Connected Devices.* Accessed here.

Sector	Type	Technology	Program Sponsors
Residential	Building Envelope	High-Performance Windows (e.g., ENERGY STAR Most Efficient)	Minnesota ETA;[175] **Mass Save;**[176] and **many more**[177]

The prime enabling condition for deploying these technologies was state-level policies promoting energy efficiency, decarbonization, electrification, or market transformation, such as those in California, Illinois, New York, and Massachusetts. In addition, states with a lower “spark gap,” the difference in cost between electricity vs. natural gas, experience fewer economic barriers to scaling new electric technologies, which can substitute for fossil fuel technologies. Also, state and utility programs sometimes favored emerging technologies by altering other DSM programs, such as Massachusetts’ elimination of incentives for LEDs without networked controls.[178] State- and regional funding streams to support research and pilots, including emerging technology research through NEEA, CalNEXT, and NYSERDA, helped drive the development of several emerging technology programs. Naturally, utility and state programs also align with federal programs such as ENERGY STAR or Inflation Reduction Act tax credits. Other enabling conditions stemmed from local factors, such as typical housing stock with sash windows compatible with window heat pumps, the prevalence of single-paned windows that could be upgraded with high-performance windows, and the presence of industries that supported the development of skilled tradespeople (e.g., drilling expertise for ground-source heat pump installers).

The emerging technologies, despite their variety, faced many of the same barriers to adoption:

- Buyer and installer preferences for “like-for-like” replacements
- High first cost
- Buyer and installer unfamiliarity with new technologies, how to install them, and how to maintain them
- Uncertain return on investment
- Concerns about durability or longevity
- Lack of equipment availability
- Buyer preferences to replace equipment on failure/in an emergency
- Electric appliances were sometimes more expensive to operate than fossil fuel alternatives, depending on local fuel rates

Other barriers were specific to particular technologies. For instance, heat pump water heaters were generally larger than conventional water heaters, which meant homes, restaurants, and multifamily buildings needed larger spaces to accommodate them than traditional electric resistance or fossil fuel water heaters. Commercial and central heat pump water heaters or boilers required complex design work, but appropriate design and sizing tools were largely unavailable. These technologies were also complicated to install and test. In the case of central boilers, building inspectors were unaware of differences in heat pump operation and needed guidance to accurately assess system installation and performance. Windows were always custom-built, and homeowners were unaware of the added benefits of “envelope first” improvements to HVAC costs.

Very high efficiency dedicated outside air systems, building and wastewater heat recovery, networked lighting control with HVAC integration, and individual or community ground source heat pumps are all examples of integrated systems

[175] Minnesota ETA. *High-Performance Windows Market Transformation Plan* (2023). Accessed here.
[176] Mass Save. *Windows.* Accessed here.
[177] Partnership for Advanced Window Solutions. *Show Me the Money!* (2025). Accessed here.
[178] Levin Nock et. al. *2030 Goals Require Long Term Efficiency Plans that Specify Networked Lighting Controls* (2024). Accessed here.

relying on multiple pieces of equipment thoughtfully designed and installed for maximum energy benefits. Barriers specific to such integrated systems included constraints on the existing building structure that limited design and installation options (thus, integrated systems were easier to place in new construction or major renovations) and silos between tradespeople working on different parts of the system (e.g., electricians and HVAC installers). Also, ground source heat pumps faced siting constraints and necessitated additional drilling or infrastructure permissions when whole neighborhoods were served.

INNOVATIVE PROGRAM DESIGNS

Traditionally, DSM programs were limited to utility-provided rebates for customers to purchase energy-efficient equipment. Utilities offered the rebates only until annual savings goals were met and were often agnostic about which customers redeemed rebates. Beginning in the late 1990s, market transformation program administrators pioneered other, often multifaceted programmatic approaches to encourage the adoption of energy-efficient technologies. While market transformation programs continue to develop DSM programs, states and utilities have expanded what DSM programs do and which customers they serve. Innovative programs support additional goals, such as customer health or peak load reduction, and engage in activities well beyond offering rebates, ranging from sophisticated customer targeting to providing long-term planning advisors for home or business deep energy retrofits.

The research team identified 18 innovative program designs that Missouri stakeholders could consider, including residential and commercial technologies. Program sponsors with a footprint in comparison states are bolded.

Table 33. Potential Innovative Program Designs for Missouri Programs

Sector	Description	Key Design Elements	Program Sponsors
Commercial	Building Performance Standards	Set or promote energy use intensity or EE standards for existing buildings, gradually phasing in additional buildings and/or EE requirements.	States of Colorado, **Maryland**, **Oregon**, and Washington;[179] several municipalities
Commercial	Utility Allowance Education	Develop and disseminate resources about how utility allowances for publicly owned multifamily buildings can inhibit or support heat pump installations.	TECH Clean California[180]
Commercial	Multifamily and Commercial New Construction Consulting	Design and construction consulting for new multifamily buildings.	MN CEE;[181] Building Initiative for Low-Emissions Development (BUILD) California[182]
Commercial	Central HPWH Consulting	Design, installation, and commissioning support for existing multifamily buildings adding central HPWHs.	TECH Clean California[183]

[179] State Climate Policy Dashboard. *Building Performance Standards.* Accessed here.
[180] TECH Clean California. *Aligning Utility Allowances with Electrification* (2024). Accessed here.
[181] Center for Energy and Environment. *New Construction Services.* Accessed here.
[182] California Energy Commission. *Building Initiative for Low-Emissions Development Program.* Accessed here.
[183] TECH Clean California's Multifamily Pilot is still ongoing but has released two case studies with lessons learned as well as informational webinars here.

Sector	Description	Key Design Elements	Program Sponsors
Commercial; Residential	Whole Building Retrofit Planning and Support	Provide long-term planning tools and consulting for comprehensive building renovations, enabling heat pump HVAC, HPWHs, etc. Pilot asset management and investment decision-making processes that value efficiency and decarbonization.	TECH Clean California;[184] CalMTA;[185] NYSERDA;[186] **NEEA;**[187] **Efficiency Vermont** and **Northeast Energy Efficiency Partnerships (NEEP);**[188] Platte River Power Authority[189]
Commercial; Residential	Energy Codes	Increase EE required in new construction via local and/or state codes.	**NEEA;**[190] Minnesota ETA;[191] **NEEP**[192]
Residential	New Construction Consulting	Design and construction consulting for new single family buildings.	MN CEE[193]
Residential	High Energy Use Alerts	Customers get a text or email message when their energy use increases month over month.	Salt River Project (SRP)[194]
Residential	Customer Targeting	Identify customers to recruit for EE or fuel-switching programs based on characteristics such as likelihood of reduced energy bills or lack of prior program participation.	TECH Clean California;[195] AIC[196]
Residential	Health/Safety Measures	Remediate health (e.g., indoor air quality) or safety concerns (e.g., accessibility needs for customers with disabilities), adding EE measures as possible.	AIC[197]; TECH Clean California[198]
Residential	Building Repairs to Enable EE Measures	Remediate structural and infrastructural issues in homes to allow otherwise impossible heat pump installations.	TECH Clean California[199]
Residential	HPWH Loaner Program	Provide loaner water heaters while customers await delivery and installation of new HPWHs.	TECH Clean California[200]
Residential	Power Efficient Design/Watt Diet	Avoid electrical panel replacements and reduce overall electricity use with long-term planning, efficient appliances, and circuit pausing/sharing.	Redwood Energy;[201] Sacramento Municipal Utility District (SMUD)[202]

[184] TECH Clean California. *Multifamily Electrification Readiness*. Accessed here.
[185] CalMTA. *Commercial Building Efficiency Accelerator Market Transformation Advancement Plan* (2025). Accessed here.
[186] Two NYSERDA webpages include information about comprehensive retrofit projects: Owner's Representative Services for Multifamily Buildings - NYSERDA and Reports - NYSERDA
[187] NEEA. *Commercial Whole-Building Performance.* Accessed here.
[188] Zero Energy Now. Accessed here.
[189] Efficiency Works™. *Whole home upgrade - The Efficiency Works Recommended Pathway for Residential Electrification.* Accessed here.
[190] NEEA sponsors many codes-related reports, which can be found here.
[191] Minnesota ETA. *Codes and Standards Advancement Market Transformation Plan* (2024). Accessed here.
[192] Northeast Energy Efficiency Partnerships (NEEP). *Building Energy Codes and Appliance Standards*. Accessed here.
[193] Center for Energy and Environment. *New Construction Services.* Accessed here.
[194] Salt River Project (SRP). *You Got a High-Usage Alert, Now What?* Accessed here.
[195] TECH Clean California has piloted a few different customer targeting approaches. See TECH Public Reporting Innovative Customer Targeting Pilot and TECH Clean California. *Addressing Non-Standard Fuel Switching through Heat Pump Incentives in Rural, Northern California* (2023). Accessed here.
[196] The JPI Group and Opinion Dynamics. *Market Development Initiative Evaluation First Assessment Report* (2024). Accessed here.
[197] See here for information about AIC's Accessibility Initiative. For information about AIC's Healthier Homes Initiative, see Opinion Dynamics. *Healthier Homes Program Design Review and NEI Research* (2025). Accessed here.
[198] TECH Clean California. *Alameda County Green and Healthy Homes* (2023). Accessed here.
[199] TECH Clean California has piloted two different approaches to building remediations. See TECH Public Reporting Low-Income Heat Pump Adoption Pilot and TECH Clean California. *Addressing Home Repair Barriers in Marin Clean Energy's Home Energy Savings Program* (2024). Accessed here.
[200] TECH Clean California. *Bridging the Gap to Heat Pump Adoption: Water Heater Loaner Program* (2023). Accessed here.
[201] Redwood Energy. *A Pocket Guide to All-Electric Retrofits of Single-Family Homes* (2022). Accessed here.
[202] Sacramento Municipal Utility District (SMUD). *Specifications & Qualified Product List* (2025). Accessed here.

Sector	Description	Key Design Elements	Program Sponsors
Residential	Rebate Layering	Add HPWH assessment and installations when other EE measures are being installed.	TECH Clean California[203]
Residential	Heat Pump Electric Rate	Lower operating costs for heat pumps with special electric rates for heat pump adopters, including for dual-fuel HVAC systems.	Minnesota ETA[204]
Residential	Home Energy Ratings in Real Estate Transactions	Include EE information in Multiple Listing Services listings or provide energy performance information.	NEEP;[205] NEEP and Efficiency Vermont[206]
Residential	Reduced Mortgage Rate for EE Improvements	Reduce 30-year fixed-rate mortgage loan rates by ½ percent when buyers invest at least 10% of the loan amount in EE improvements.	NEEP and Efficiency Vermont[207]
Residential	Remote Heat Pump HVAC Installation Software	Allow remote expert HVAC technicians to assist less experienced technicians with heat pump installation and troubleshooting.	TECH Clean California[208]

Analysis revealed similar primary drivers of innovative program design as for the use of emerging technologies: state-level policies promoting energy efficiency, decarbonization, electrification, or market transformation. The other facilitating conditions were, among the commercial programs, the availability of lower-cost financing for building owners, and, among the residential programs, a local ordinance requiring sellers to provide a home energy label when selling a home.

Several barriers to commercial programs matched those for emergent technologies, such as the high cost of purchasing energy-efficient equipment compared to less efficient alternatives. Barriers unique to commercial programs included:

- Commercial and multifamily building owners opted to pay fines for failing to meet building performance standards rather than undertake expensive and complicated renovations
- Utility allowances were structured by default to penalize switching from fossil fuel use, and building owners needed education to change their utility allowance practices
- Commercial and multifamily building renovations and the utility allowance process took many months to years
- Commercial and multifamily building owners expected a fast return on investments and did not perceive the complete financial value of EE upgrades
- Commercial and multifamily building owners did not make the kinds of long-term capital investment plans that maximize energy savings

Similarly, residential programs encountered the emerging technology barriers, but also the following challenges:

- Difficulty counting energy savings
- Lack of access to AMI and other customer data for targeting
- Engaging hard-to-reach households required multiple outreach channels and greater outreach expense

203 TECH Clean California. *Basset Avocado Heights Advanced Energy Community Heat Pump Water Heater Initiative* (2024). Accessed here.
204 Minnesota ETA. *Air Source Heat Pump Market Transformation Plan* (2023). Accessed here.
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206 NEEP. *Home Energy Labeling in Vermont*. Accessed here.
207 Evans, Bryan. *Energy Mortgages: A Win-Win Solution for Lenders and Borrowers* (NEEP, 2021). Accessed here.
208 TECH Clean California. *Visual Service Software* (2023). Accessed here.

- Scheduling and carrying out home assessments and installations was challenging, especially for multiple measures or extensive home repair work
- If providing loaner water heaters, needed to store and manage them at convenient locations
- National Electrical Code promoted panel replacements instead of circuit sharing or circuit pausing
- Layering multiple incentives sometimes required meeting competing or contradictory program requirements
- New electric rates required regulatory approval
- Lack of trained real estate appraisers and agents
- HVAC installers needed training not only on quality installations but also on how to use assistive software

CONCLUSIONS AND RECOMMENDATIONS

- **Conclusion:** The main driver for the implementation of innovative program designs and emerging technologies was state policies designed to achieve outcomes in addition to or instead of energy savings.
  - **Recommendation:** Missouri stakeholders should carefully vet emerging technology or program designs to choose only those likely to garner energy savings, if that remains stakeholders' main goal for programs.
- **Conclusion:** Some innovative program designs may be compatible with existing DSM programs in Missouri, such as customer targeting or funding building repairs that allow for installation of energy-saving measures like insulation or heat pumps, with relatively little effort or expense compared to launching entirely new DSM programs.
  - **Recommendation:** Identify innovative program designs or tactics within such programs that could also apply to existing programs. Consider small-scale pilots of these designs or tactics to test and later scale up those that deliver savings, increase customer access, or achieve other stakeholder goals.

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