REPORT

Power Play: AI's Role in Energizing America's Energy Sector

PART 3 | THE LEGISLATIVE LANDSCAPE

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Power Play: AI's Role in Energizing America's Energy Sector

Part 3 | The Legislative Landscape

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The National Conference of State Legislatures is the bipartisan organization dedicated to serving the lawmakers and staffs of the nation's 50 states, its commonwealths and territories.

NCSL provides research, technical assistance and opportunities for policymakers to exchange ideas on the most pressing state issues, and is an effective and respected advocate for the interests of the states in the American federal system. Its objectives are:

- Improve the quality and effectiveness of state legislatures.
- Promote policy innovation and communication among state legislatures.
- Ensure state legislatures a strong, cohesive voice in the federal system.

The conference operates from offices in Denver, Colorado and Washington, D.C.

Executive Summary

The energy industry is rapidly evolving and advancing with the integration of artificial intelligence. Policymakers at the federal, state and local levels have acted by discussing, drafting and enacting legislation and regulations to address a variety of aspects and applications of AI in the energy industry. This document provides an overview of the current state and federal legislative and regulatory environment surrounding AI in the energy industry as of February 2026, as well as additional policy considerations for policymakers.

The Legislative and Regulatory Landscape

Congress

AI LEGISLATION

Congress is considering the ongoing opportunities, challenges and risks of AI implementation nationwide. Such considerations, demonstrated by bills introduced in the 119th Congress, vary widely and include technology assessments of liquid-cooling systems for AI computing, studying the impact of AI and data center site growth on energy supply, imposing or incentivizing power-generation requirements on data center companies and notably a proposed 10-year moratorium on state and local AI regulations.

Congress is also considering tools it can use to bolster AI use, including federal incentives and updates to legislation to remove barriers.

Congress has already enacted a few key pieces of legislation related to AI. These include the National AI Initiative Act of 2020, which is intended to increase and coordinate federal and public investments to encourage U.S. dominance in the field of AI. Additionally, Congress is thinking about AI in energy and has introduced several bills focused on the issue. As of January 2025, almost none of this legislation has passed, the exception being the AI provisions contained in the (OBBBA) (P.L. 119-21). These provisions include allocating funds to improve AI capabilities at the Department of Defense and Department of Commerce and to support the use of AI by U.S. Customs and Boarder Protection for a variety of purposes, including mission support.
One Big Beautiful Bill Act (OBBBA) (P.L. 119-21). These provisions include the allocation of funds to improve AI capabilities at the Department of Defense and Department of Commerce and to support the use of AI by U.S. Customs and Boarder Protection for a variety of purposes, including mission support.

In addition to the above provisions, Congress also attempted to include a 10-year AI legislation moratorium in initial draft versions of OBBBA. Specifically, the proposal would have infringed on state and local authority to enact or enforce any restrictive AI legislation or regulation for at least 10 years. If the moratorium had been included in the final legislation, it would have significantly interfered with states' ability to effectively legislate in all areas of this rapidly evolving and consequential policy domain, including areas that have AI-related implications such as cybersecurity, public safety and in the permitting, construction and operation of data centers. Such a moratorium could also leave communities vulnerable in the face of rapidly advancing technologies. While NCSL was able to defeat this AI moratorium through an intense lobbying campaign, Congress continues to pursue other efforts to preempt state authority in the AI arena.

Digging Deeper: NCSL AI Moratorium Resources

More information about the impact this proposed language could have had on states can be found in the NCSL Urges Congress to Oppose AI Moratorium on States letter.

ENERGY LEGISLATION

In recognition of the implications of AI on the energy sector Congress has considered various energy related issues, with a particular focus on energy affordability and power generation:

The Department of Energy Artificial Intelligence Act of 2024 (H.R. 9671), in the 118th Congress, which would have required the DOE to create an AI research and development program.

Power for the People Act (S. 3682), which would help promote the creation of data center specific load queues and rate classes to protect reliability and affordability for other grid users.

The DATA Act (S. 3585), which exempts newly established, physically isolated consumer-regulated electric utilities from federal oversight under the Federal Power Act and related laws, provided they never connect to the broader power grid.

The GRID Act (S. 3852), which requires data centers to either power themselves off-grid or prove they won't raise electricity rates for residential customers, while mandating public disclosure of their utility usage, real estate acquisitions and financial agreements with utilities.

Energy Choice Act (H.R. 3699), which would preempt states from banning an energy service's connection, reconnection, modification, installation or expansion based on the type of energy source.

Congress is also considering efforts to reform federal permitting, which if enacted would have significant implications for energy policy and several other policy areas. Some of the key bills and provisions being considered by the 119th Congress includes:

- The Standardized Permitting and Expediting Economic Development Act (SPEED Act) (H.R. 4776), which passed the House in December 2025 and would:
- Update judicial review under the National Environmental Policy Act (NEPA) by requiring suing

parties to have participated in the permit public comment period and only allowing suits that pertain to the suing party's specific comments.

- Reduce the statute of limitations for litigation to 150 days.
- Codify the U.S. Supreme Court's decision in Seven County Infrastructure Coalition v. Eagle County, which limits NEPA permits from considering indirect environmental effects of a project.
- Reduce permitting paperwork.
- Narrow applicability of NEPA and expand categorical exclusions.
- ePermit Act (H.R. 4503), which passed the House in December 2025, would require the digitization of the NEPA permitting process.
- Streamlining Powerlines Essential to Electric Demand and Reliability Act (SPEED and Reliability Act (H.R. 5600), which focuses primarily on permitting for electric power transmission, would:
- Enhance federal backstop authority and transfer certain federal project designation authorities to the Federal Energy Regulatory Commission (FERC).
- Expand and mandate certain permitting process engagement, including state and local involvement.
- Ensure appropriate cost allocation of projects.

The Administration

FIRST TRUMP ADMINISTRATION

The White House, like Congress, is also actively working to address AI. The first executive orders on AI were issued during the first Trump Administration, including:

- Executive Order (E.O.) 13859: Maintaining American Leadership in Artificial Intelligence, which established the American AI Initiative, promoting AI research, the development of America's AI workforce and the creation of a governance framework led by the National Institute of Standards and Technology. It indirectly addresses energy by encouraging AI adoption across all sectors, including energy. The National AI Initiative Act of 2020, as a part of the FY 2021 National Defense Authorization Act, later codified this EO into law. This EO also resulted in the U.S. Leadership in AI: A Plan for Federal Engagement in Developing Technical Standards and Related Tools report.
- E.O. 13960: Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government, which builds on EO 13859, emphasizing lawful, ethical and accountable federal AI use, including potential applications in energy.

Further actions under the first Trump administration included a White House Summit on Artificial Intelligence in Government in September 2019 and the investment of $1 billion for the establishment of 12 AI-focused research and development institutions in 2020. Additionally, in January 2021, the first Trump administration launched the National Artificial Intelligence Initiative Office to coordinate U.S. AI strategy, research and policymaking.

BIDEN ADMINISTRATION

During the Biden Administration several executive orders were issued addressing AI, including:

- E.O. 14028: Improving the Nation's Cybersecurity, which tangentially addresses AI as a means of improving technology security more generally across all sectors.
- E.O. 14110: Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, which outlined eight guiding principles for federal AI governance and was the first major framework for AI safeguards. However, this was revoked by the second Trump Administration.

- E.O. 14141: Advancing United States Leadership in Artificial Intelligence Infrastructure, which addressed AI's energy demands by authorizing federal support and leasing of DOD and DOE sites for AI data centers and clean power facilities.

SECOND TRUMP ADMINISTRATION

Since taking office for his second term, President Trump has issued two major AI-related orders:

- E.O. 14148: Initial Rescissions of Harmful Executive Orders and Actions, which revoked existing AI policy E.O. 14110 that was seen by the administration as an obstacle to domestic AI development
- E.O.14179: Removing Barriers to American Leadership in Artificial Intelligence, which directs administration officials to create an AI action plan. This plan, Winning the Race: America's AI Action Plan, was released by the White House in July 2025 and identifies the three pillars that the federal government is pursuing to further American AI: accelerating AI Innovation, building American AI infrastructure and leading international AI diplomacy and security.

Additional relevant AI-related presidential orders include:

- E.O. 14318: Accelerating Federal Permitting of Data Center Infrastructure, which is intended to remove federal regulatory burdens to assist with fast-paced buildouts of AI infrastructure including data centers, high voltage transmission lines, and other related equipment. The order also directs the use of federal land and resources to assist with the rapid development of data centers.
- E.O. 14320: Promoting the Export of the American AI Technology Stack, which is intended to promote and support the American AI industry by encouraging the export of full-stack American AI technology packages.
- E.O. 14365: Ensuring a National Policy Framework for Artificial Intelligence, which is intended to promote American leadership in AI to help ensure national and economic security by opposing state-by-state AI regulations, including state laws that require AI to address algorithmic discrimination or regulate AI beyond a state's borders. The E.O. calls on Congress to enact a national AI framework to preempt state legislation of AI. It also creates an AI Litigation Task Force to challenge state AI laws the administration perceives to be unlawful, exceeding jurisdiction or otherwise onerous or adverse to administrative policy. Furthermore, the E.O. directs a punitive restriction of Broadband Equity Access and Deployment Program funding for states with perceived onerous AI laws.

Digging Deeper: NCSL Executive Orders Resource

More information about current Trump Administration executive orders, can be found on NCSL's Trump Administration Actions: Key Executive Orders and Policies Tracker.

Though not directly related to AI, President Trump has also signed some relevant energy-related presidential orders including:

- E.O. 14156: Declaring a National Energy Emergency, which authorizes expanding domestic energy production, particularly oil and gas, and the order may be used to keep certain power plants open. This order could also support new energy infrastructure projects, such as pipelines and power plants.
- E.O. 14260: Protecting American Energy from State Overreach, which seeks to remove state barriers to the development, siting, production and investment in or use of domestic energy resources and is intended to strengthen domestic energy supply. The order specifically identifies oil, natural gas, coal, hydropower, geothermal, biofuel, critical minerals and nuclear energy. It directs the attorney general to stop the enforcement of state laws and civil actions determined

to be illegal, including state laws and regulations that the administration identifies as burdensome and ideologically motivated, and those that the administration deems adverse to interstate and international trade and the principle of federalism.

- E.O. 14262: Strengthening the Reliability and Security of the United States Electric Grid, aimed at improving grid reliability and security and rising electricity demand from data centers and manufacturing. It also authorizes officials to streamline and expedite the DOE's emergency actions under section 202(C) of the Federal Power Act. In July 2025 the White House released the "Winning the Race: America's AI Action Plan"

Key themes of these Presidential AI and energy actions include American dominance and leadership, deregulation, federal preemption, investment and workforce development.

As the Trump administration continues to issue presidential orders the accuracy of this section may change after the publication of this resource. Please visit whitehouse.gov for additional presidential actions.

Executive Branch Agencies

Recent related efforts to address AI in energy, beyond implementing the president's orders and policy agenda, are being conducted across federal agencies. According to Stanford's report, 84 AI-related regulations in 2023 and 2024 across 42 agencies. Some of the key recent actions are highlighted below.

DEPARTMENT OF ENERGY

The DOE in particular has been extensively involved in AI, especially as it pertains to energy. Some of the agency's recent efforts include, but are not limited to:

- Launching Genesis Mission in collaboration with several private companies, a national initiative to advance American science with the help of AI by creating a platform to allow for the connection and integration of information, resources and technologies.
- Launching the Speed to Power Initiative to accelerate development and construction of large-scale grid transmission and generation projects to meet growing energy demands.
- Developing AI tools, including the VoltAIc Initiative, to improve energy project siting and permitting processes.
- Developing the PermitAI project, through the Pacific Northwest National Laboratory, which is intended to assist local permitting departments with accelerating energy infrastructure deployments.
- Participating in the Trump administration's goal of advancing American AI through the utilization of federal lands, in compliance with E.O. 14318, by identifying four DOE locations for private companies to develop AI data center and energy generation projects.

Digging Deeper: VoltAIc Initiative

The DOE's VoltAIc Initiative is seeking to leverage AI and machine learning to optimize site selection by analyzing vast datasets on land use, environmental impact, grid capacity, and regulatory constraints, to ultimately streamline decision-making and reduce project timelines at the federal, state and local levels.

FEDERAL ENERGY REGULATORY COMMISSION

FERC through its oversight has also started to weigh in on the conversation around AI and energy. Most notably:

- U.S. Secretary of Energy Chris Wright directed FERC in October 2025 to initiate a proposed rulemaking that would accelerate the interconnection of large loads to the grid, to support American AI and manufacturing.

- FERC issued Item E-1, Docket Nos. EL25-49-000, et al. in December 2025, which requires the regional transmission organization (RTO) Pennsylvania-New Jersy-Maryland Interconnection (PJM) as a grid operator to revise its existing tariff and establish clear and consistent rules regarding service for large loads with co-located generation facilities, such as data centers, to help protect both grid reliability and affordability for other grid consumers. FERC issued Docket No. ER26-247-000 in January, which approved the RTO Southwest Power Pool's new study process for expediting interconnection for new high impact large loads, those that would use self-generation or pair with current or planned generation.

ENVIRONMENTAL PROTECTION AGENCY

Like Congress, the EPA announced in September 2025 that it is pursuing efforts to reform project permitting to assist with the build out of American AI. These efforts include the issuance of memos regarding requirements for preconstruction permits for large facilities, halting application of prior reactivation policy in its New Source Review (NSR) air permitting process and issued new NRS guidance on beginning actual construction to clarify certain air permitting steps.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

The National Institute of Standards and Technology has developed an AI Risk Management Framework in collaboration with public and private sectors to help address and mitigate AI risks. The agency also runs the Center for AI Standards and Innovation to help serve as a primary federal government point of contact for industry regarding commercial AI systems.

Digging Deeper: Agency Resources

Several federal agencies have developed data center and AI in energy resources for use by the public and stakeholders:

U.S. DOE

- Artificial Intelligence webpage
- AI for Energy webpage

U.S. Department of the Interior

- Artificial Intelligence webpage

U.S. EPA

- Artificial Intelligence webpage
- Clean Air Act Resource for Data Centers webpage

State Legislative Landscape

States continue to introduce and enact AI-related legislation. During the 2025 legislative session, all 50 states, Puerto Rico, the Virgin Islands, and Washington, D.C., introduced legislation. At least 35 states adopted resolutions or enacted legislation regarding AI. Over 10 states introduced AI legislation specific to the energy sector in 2025. State AI legislation focused on the energy sector includes proposals aimed at building the AI and energy workforce, addressing resource utilization concerns and tax incentives. At least five states have pending legislation regarding AI and energy issues in the 2026 legislative session year.

CYBERSECURITY

Cyber threats are a growing concern because AI can and has changed the scale and speed of cyberattacks. In recent years, legislatures have considered and enacted legislation to improve the cybersecurity of utilities and energy infrastructure. Louisiana took a broad approach to cybersecurity by enacting SB 152 in 2023. This legislation established the Louisiana Cybersecurity Commission to coordinate cybersecurity efforts among all levels of the government, specifically focusing on critical infrastructure sectors, which include energy, nuclear and dam infrastructure. By centralizing coordination across government, the commission is positioned to respond to AI-enabled threats that can simultaneously target multiple infrastructure sectors, Similarly, Utah enacted legislation, HB 280, in 2022 to create its own state cybersecurity commission focused on critical infrastructure. Similar to Louisiana, a unified commission structure helps ensure that AI-driven attacks are met with a coordinated, statewide defensive posture.

Maryland enacted HB 969 in 2023 requiring the Public Service Commission (PSC) to establish cybersecurity standards and best practices for regulated entities. The bill also requires the PSC to have cybersecurity experts on its staff to advise on oversight and standards. Embedding technical expertise directly with the PSC is particularly critical in the AI space, where attack methods evolve rapidly and regulators without specialized knowledge may struggle to identify or respond to AI-augmented intrusions in time. Additionally, Tennessee SB 2282, enacted in 2022, requires utilities to implement cybersecurity plans in case of threats such as unauthorized use, alteration, ransom or destruction of electronic data. Mandating advance planning directly address the threat posed by AI-powered ransomware and automated intrusion tools, which can execute attacks faster than utilities can reactively mobilize a response.

Maine enacted HB 147 (2025) expanding the definition of terrorism to provide that terrorism includes conduct that constitutes a cyberattack on information and communications technology infrastructure, systems or services affecting the state or the state's critical infrastructure, whether physical or non-physical. Classifying AI-facilitated cyberattacks on critical infrastructure as terrorism ensures that the full weight of law enforcement and prosecutorial resources can be brought to bear against increasingly sophisticated, AI-assisted threat actors. In 2026, at least 20 states have pending legislation regarding cybersecurity and energy and other critical infrastructure.

DATA CENTERS

As data centers continue to become integral pieces of infrastructure, state legislatures are considering legislation aimed at addressing data centers' energy consumption. In 2022, Washington enacted HB 1846 expanding sales tax exemptions for rural data centers and encouraging data centers claiming the exemption to adopt practices to improve their energy efficiency. As AI workloads dramatically increase data center power consumption, incentivizing energy efficiency at the outset helps prevent AI-driven demand from outpacing grid capacity. In 2024, Michigan enacted a similar bill, SB 237, encouraging data centers receiving tax incentives to implement energy and water efficient technology. By trying incentives to improve efficiency standards, Michigan's approach

directly targets the resource intensity of AI computing infrastructure, which requires significantly more energy and cooling than traditional data center operations.

So far in 2026, Colorado's HB 1030 and Virginia's SB 465 are looking to continue this trend. Both these introduced bills would both require new data centers to meet specific energy efficiency targets to receive tax incentives if enacted. Colorado would require data centers to achieve certain energy efficiency certifications, such as Gold Level LEED or Energy Star certification to qualify for tax incentives. Meanwhile, Virginia would require data centers to achieve a power usage effectiveness standard of no more than 1.2 to be eligible for the sales and use tax exemptions. Power usage effectiveness is a standard data center energy efficiency metric that represents the ratio of total facility power to IT equipment power.

In addition to implementing energy efficient technologies, states have also looked to facilitate onsite generation for data centers to help compensate for their high energy demands. In 2024, Maryland enacted SB 474 to exempt backup generation stations for data centers from the requirement to obtain a certificate of public convenience, which could help ease permitting for these types of on-site energy facilities. In 2025, West Virginia enacted HB 2014 creating the High Impact Data Center Program and the Microgrid Development Program. The legislation aims to promote the development of data centers in the state along with microgrids. A microgrid is a group of interconnected distributed energy resources that can operate as a controllable entity, allowing it to disconnect from the grid and still provide power to data centers. The bill requires a designated liaison to serve as a point of contact for microgrid districts and data centers to coordinate their development.

Digging Deeper: NCSL Policy

At the 2025 NCSL Legislative Summit during the NCSL Business Committee Meeting, the membership body passed the Data Center Impacts on Power Generation and Grid Resiliency Resolution. This policy serves as the basis for NCSL's federal advocacy on data centers.

The high energy demand from data centers will require significant infrastructure projects, such as new transmission lines and generation facilities to supply sufficient energy. Such infrastructure projects are significant financial investments and are often recouped by utilities through their rates. However, since these projects would primarily benefit data centers, many states are considering legislation to prevent unrelated customers from facing higher electricity rates associated with data centers. In 2025, Maryland (SB 937), Oregon (HB 3546) and Minnesota (HF 16) all enacted legislation to create a new customer class and specific rate schedule for large load customers, like data centers, to ensure that they cover the just and reasonable costs associated with any infrastructure build out necessary to interconnect or serve the large load customers.

States are also taking action to facilitate implementing nuclear generation to meet data centers' energy demand. For example, Texas HB 14 created the Texas Advanced Nuclear Office to offer funding for nuclear projects and create a more efficiency regulatory process to reduce the length of the permitting process. Louisiana also enacted SB 127 to create a federal permitting parity program to expedite the permitting process for advanced nuclear generation facilities. In recent years, multiple states, including Colorado, Connecticut and Idaho, have added nuclear to their state's definition of clean energy to allow nuclear energy to qualify for any clean energy requirements.

WORKFORCE, ENERGY AND AI

States are introducing legislation to help develop and enhance the AI capabilities of their workforce. Colorado introduced legislation in 2025, which failed to pass, that would have created a certification program that data centers, including those using AI, could apply to qualify for a grid enhancement tax credit. To be eligible, data centers would have needed to invest in workforce development programs. Hawaii introduced legislation in 2025, to create the Aloha Intelligence Institute within the University of Hawaii to develop, support and advance AI initiatives statewide, including workforce development initiatives in fields such as renewable energy.

Some states are also initiating public-private partnerships and appropriating funds for this same goal. In April 2025, Oregon's governor established a memorandum of understanding between the Nvidia Corporation, a multinational technology company, and the state of Oregon to expand AI education and workforce training and to strength industry-specific workforce development in industries such as energy. The governor also directed $10 million to help build a robust tech workforce in Oregon.

Local Legislative Landscape

The Stanford report found that a majority of local U.S. policymakers—township, municipal and county level—strongly support AI regulation, with 73.7% concurring with this policy position in 2023. The report also found that the priorities for these local lawmakers focused on and were most supportive of stricter data privacy, retraining for unemployed workers and AI deployment regulations.

Policy Options and Considerations

As policymakers evaluate how to approach AI generally and its application within the energy sector, there are a number of policy options and suggestions to consider. Several of these have already been addressed in Power Play: AI's Role in Energizing America's Energy Sector Part 1: Opportunities and Power Play: AI's Role in Energizing America's Energy Sector Part 2: Challenges. A round up of policy options and considerations for policymakers are discussed below.

One potentially useful resource for policymakers is the DOE's Office of Energy Efficiency & Renewable Energy' Distributed Energy Resource Interconnection Roadmap issued in January 2025. This roadmap outlines several key policy considerations to ensure AI-driven energy advancements align with broader grid reliability and efficiency goals. The roadmap notes that as data centers become more integral to AI computing, some states have begun rejecting interconnection requests. These rejections underscore the need for greater temporal and spatial flexibility in data center operations. However, the lack of standardized terminology for flexible operations across energy assets is a significant hurdle that limits the scalability of AI demand response and flexibility programs even when multiple stakeholders express interest in collaborating. Recommendations from the DOE that policymakers may want to consider when addressing this issue include:

Definition: Grid-Enhancing Technologies

Hardware or software technology solutions that can help improve the capacity, efficiency, and reliability of the transmission of electricity.

For more information check out NCSL's GETs Issue Brief.

- Convening stakeholders to resolve energy supply bottlenecks and improve data-sharing strategies for enhanced flexibility.
- Developing standard requirements, to incentivize both efficiency and demand response capabilities, particularly as investments in data infrastructure accelerate.
- Expanding technical support for state energy planning departments, including analyses of infrastructure investments and their impact on communities.
- Leveraging grid-enhancing technologies (GETs) to better use the existing grid.
- Integrating data center backup capacity into emergency response strategies.

The DOE's Secretary of Energy Advisory Board issued Recommendations on Powering Artificial Intelligence and Data Center Infrastructure in July 2024. While the policy options are intended for federal application, they are also intended to "support [...] growing power demands reliability and affordably without harming existing customers." Policymakers at all levels may want to consider the following findings and recommendations when developing non-federal policy:

- Strengthen Grid Reliability and Backup Power Capacity
    - Explore, develop and implement novel backup power strategies for the electric grid.
    - Evaluate or expand additional backup generation uses during emergencies.
- Promote GETs by considering policies addressing the implementation of GETs
- Equip State Energy Planning with Better Tools
    - Consider options that assist state energy planning departments with the analysis of impact on communities from large load infrastructure investment and development.
- Expand Clean Energy and Storage Deployment
    - Consider opportunities or incentives to accelerate development of generation and energy storage, delay removal of generation sources from the electric grid and opportunities to enhance active generation sources.
- Anticipate and Plan for Load Growth due to AI Infrastructure
    - Understand regional and local projections of load and load flexibility from data centers to help anticipate power demand location and timing to help guide investments and identify efficiency opportunities.
    - Consider integration of generation, transmission, distribution and load flexibility at the state and regional levels.
- Encourage Efficient Facility-Level Energy Use
    - Consider incentives for solutions to high-resource demands at the individual energy-consumption facility level.
    - Explore public-private partnerships and additional funding that may help advance AI computing and its energy efficiency.

Other considerations for policymakers include engagement with the public and other stakeholders related to the opportunities and challenges associated with AI, data centers and the energy infrastructure needed to power them. Additionally, stakeholders such as utilities and grid operators can be consulted to ensure feasibility of policy proposals prior to implementation.

Conclusion

As AI utilization grows, energy demand surges and the nation's aging energy infrastructure strains under mounting pressure, the role of policymakers in shaping the future of energy, AI and the intersection between the two is more vital than ever. The integration of AI into the energy sector presents both significant opportunities and formidable challenges. AI offers promising tools that can help enable smarter grid management, real-time efficiency improvements and more reliable integration of energy generation resources. However, realizing these benefits will require careful policy design, investment in infrastructure modernization and thoughtful oversight of the ethical, environmental and other impacts of AI deployment. By thinking about forward-looking strategies, such as incentives for innovation, stronger planning tools and equitable infrastructure development, policymakers can help ensure the grid remains resilient, efficient and accessible and help create a more efficient, reliable, and sustainable energy future for America.

Digging Deeper: Additional NCSL Resources

For further guidance and information, explore additional NCSL resources:

- Energy State Legislation Database
- AI State Legislation Database
- Cybersecurity State Legislation Database
- Artificial Intelligence Policy Toolkit

As this brief has outlined, there is broad and ongoing involvement in AI and energy policy by both the federal government and state and local governments. These actions help demonstrate the numerous and diverging policy approaches to AI in the energy sector and policy makers will need to determine what is best for specific situations and their constituents. For a deeper exploration of the opportunities and policy options, see part one of this series. For additional information about challenges and policy options, see part two of this series.

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