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Introduction

Securing the nation's energy supply and protecting energy infrastructure is a major concern given the nation's dependence on reliable and uninterrupted energy delivery. America's energy system faces many risks, including natural disasters, energy supply disruptions, cyber attacks and deliberate acts of terrorism. The United States relies on coal, oil, natural gas, nuclear power and renewable sources to generate electricity, provide transportation, heat and cool buildings, and keep industries operating. A disrup-

tion in one part of this complex and interconnected network can easily impact other parts of the system, resulting in serious human and economic consequences.

State policymakers are concerned about the impact these disruptions could have on the economy, public health and safety, and the environment. More than 80 percent of the energy infrastructure is owned and managed by the private sector, so modernizing and protecting the energy system will require a coordinated effort between federal, state and local officials as well as private entities. State policies play a critical role in energy security by ensuring that energy infrastructure is resilient and that officials can quickly respond to shortages, disruptions and emergencies.

responder vehicles. According to the U.S. Department of Energy, this was the first time a release from the reserve had been authorized since its founding in 2000. State and local governments also addressed impacts by rationing fuel, easing state regulations, enforcing price gouging laws and facilitating power restoration.

State Legislative Action

ENERGY SUPPLY AND EMERGENCY PREPAREDNESS RESPONSE PLANS

Energy assurance planning requires preparation and an understanding of the complexity and scope of the nation's energy assets. It also includes the development of emergency response procedures that help decision makers protect against threats and quickly recover from energy disruptions. At least eight states have proposed bills this session that revise or adopt new provisions for maintaining energy emergency preparedness plans. Topics include: requiring certain residences and businesses to install standby generators, requiring utility service providers to report emergency interruptions online and by telephone and requiring additional gas pipeline safety measures. At least 15 pending bills in seven states would consolidate state agencies to improve coordination and governance during energy emergencies. In addition, several states have introduced bills that enhance energy security by providing tax benefits, credits or financing measures to promote the adoption of emergency preparedness equipment. The legislation introduced this session aims to mitigate the impacts of energy shortages and develop strategies to improve the response to energy emergencies.

- **California**—A.B. 869 (pending) requires the Public Utilities Commission, gas corporations and electric corporations that provide service to more than 5,000 customers to develop and publish emergency response plans.
- **Connecticut**—H.B. 6653 (enacted) streamlines regulations within Connecticut's Department of Energy and Environmental Protection to assist municipalities.
- **Hawaii**—S.B. 1080 and H.B. 849 (both pending) delineate the emergency management functions and powers of the governor and mayors.
- **Maryland**—S.B. 481 (enacted) establishes a task force to study the implementation of tax benefits for emergency preparedness. Additionally, Maryland introduced several bills this session requiring the Maryland Emergency Management Agency (MEMA) to establish emergency response standards for gas transmission companies.
- **New Jersey**—At least six bills introduced this session would require electric and gas public utilities to file certain information regarding emergency preparedness including maps and utility infrastructure to municipal emergency management personnel. At least nine pending bills in New Jersey address the installation of standby emergency generators in certain residences and businesses including hospitals, nursing homes, gas stations and grocery stores.
- **New York**—A.B. 2136 and S.B. 3500 (both pending) would provide New York's Division of Homeland Security and Emergency Services with the power to decide if the sale, lease or operation of state-owned critical infrastructure would

threaten public security.

- **Pennsylvania**—S.B. 35 (pending) provides authority to the governor relating to disaster preparedness and emergency management activities.
- **Utah**—H.B. 302 (enacted) allows the governor to obtain information from energy resource producers, manufacturers, suppliers and consumers to determine whether shortages or an emergency will require energy resource conservation measures.
- **Virginia**—S.B. 766 (pending) would provide a tax exemption for the purchase of hurricane preparedness equipment.

INCREASING ENERGY INDEPENDENCE

At least 22 states have introduced legislation this session that aim to enhance U.S. energy security by reducing the nation's dependence on foreign oil. Most bills focus on supporting domestic natural gas or renewable energy technologies to decrease the nation's oil dependency.

- **Alaska**—H.J.R. 7 (pending) urges Congress to pass legislation to open the coastal plain of the Arctic National Wildlife Refuge (ANWR) in order to further U.S. energy independence by increasing oil and gas exploration, development, and production .
- **Delaware**—H.B. 179 (pending) supports energy efficiency investments that decrease vulnerability to energy price spikes and increase energy security.
- **Hawaii**—S.B. 18 (pending) establishes a renewable transportation fuels production tax credit to achieve greater energy security for the state.
- **Maine**—Two bills—H.B. 651 (enacted) and H.B. 886 (pending)—establish new fossil fuel reduction goals and promote renewable energy sources such as solar and wind to increase energy independence for the state.
- **Massachusetts**—H.B. 2935 (pending) requires the state to adopt a plan for replacing all use of coal as an energy resource by 2020 with renewable energy alternatives in order to increase energy security.
- **Louisiana**—H.C.R. 132 (adopted) urges Congress to enact legislation that promotes growth of domestic alternative fuel sources and reduces dependence on foreign oil.
- **Pennsylvania**—H.R. 249 (pending) urges the President and Congress to support the increased production and use of American natural gas to increase energy security.
- **Tennessee**—S.B. 582 (enacted) establishes the natural gas energy independence program, which supports increased investments in alternative fuel vehicles and fueling infrastructure.

KEYSTONE XL PIPELINE

Additionally, 13 states introduced and eight states passed resolutions urging Congress, the president or the U.S. Department of State to expediently review and approve the permit application for the TransCanada Keystone XL pipeline. The proposed 1,700 mile expansion to the Keystone pipeline would connect Cushing, Okla. to the oil refineries in the Gulf Coast of Texas as well as



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heavily on foreign oil supplies may put the U.S. at risk for supply disruptions and price shocks. Biofuels, the most common of which are ethanol and biodiesel, however, can be produced in the U.S. and used in conventional vehicles. Ethanol can currently be used by all gasoline vehicles in concentrations up to about 10 percent and biodiesel can be used in conventional diesel engines without modifications.

- **Hawaii**—At least six bills introduced in 2013 broaden the biofuel production tax credits or provide funding toward biofuel research and development.
- **Iowa**—S.C.R. 5 (pending) urges the federal government to renew its commitment to energy security by requiring the increased domestic production and use of renewable fuels such as ethanol, cellulosic biofuels and biodiesel.
- **Kentucky**—H.B. 212 (enacted) requires an increase in the use of ethanol, cellulosic ethanol and biodiesel to reduce the state government's dependence on petroleum-based transportation fuels.
- **Minnesota**—At least six bills introduced this session establish a minimum biofuel content for all gasoline sold in the state.
- **New Jersey**—A.R. 167 and S.R. 106 (both adopted) support the development of biofuels to achieve greater national security.
- **New York**—S.B. 2699 (pending) establishes a pilot program to test the financial feasibility of replacing some or all of New York's roadway medians existing plantings with biofuel crops and using the fuel generated to replace imported oil used in New York's diesel vehicle fleet.
- **Rhode Island**—S.B. 816 and H.B. 5802 (both enacted) encourage the production of biofuels by requiring that all heating oil sold in the state contain 5 percent of a bio-based product.

ELECTRICITY RELIABILITY

At least 31 bills were introduced in 11 states highlighting the need for grid modernization, electricity reliability or financing projects to enhance the nation's energy security. State legislation cited aging infrastructure and more frequent weather events as key reasons for additional regulation and investment in the nation's electricity distribution and transmission system.

- **California**—A.B. 66 (pending) requires that an electrical corporation submit an annual reliability report, which includes the frequency and duration of interruptions and requires remediation of reliability deficiencies.
- **Connecticut**—S.B. 408 (failed) would have modernized the state's electric delivery system.
- **Hawaii**—S.B. 120 (enacted) authorizes economic incentives and cost recovery regulations to accelerate electric utility cost reduction and increase investments to modernize electrical grids.
- **Maine**—The Legislature voted to override Governor Paul LePage's veto of H.B. 1128, which among other provisions, promotes electricity reliability to enhance energy security in the state.
- **New Jersey**—At least seven bills introduced this session relate to maintaining and strengthening the state's energy infrastructure by ensuring reliable electric service.
- **Washington**—H.B. 1030 (pending) concerns siting interstate electricity transmission lines to increase grid reliability and security.

SMART GRID

At least eight states have introduced legislation in 2013 that addresses smart grid technology. Smart grid refers to technologies that enable more reliable and efficient delivery of electricity. An electricity disruption can cause a series of failures that impact multiple sectors including transportation, banking, commu-

