

**ENERGY POLICY MODERNIZATION ACT OF 2015**

**SECTION-BY-SECTION**

**PREPARED BY THE JOINT STAFF OF THE  
SENATE ENERGY AND NATURAL RESOURCES COMMITTEE**

**JULY 22, 2015**

## TITLE I—EFFICIENCY

### Subtitle A—Buildings

**Section 1001. Greater energy efficiency in building codes.** Amends Section 303 of the Energy Conservation and Production Act (ECPA) to add certain definitions. Amends Section 304 of ECPA to require that the Secretary of Energy encourage and support the adoption of building energy codes by States, local governments, or Indian tribes that meet or exceed model building energy codes. Amends Section 307 of ECPA to require that the Secretary of Energy support the updating of model building energy codes.

**Section 1002. Budget-neutral demonstration program for energy and water conservation improvements at multifamily residential units.** Directs the Secretary of Housing and Urban Development to conduct a pilot project that demonstrates the use of budget-neutral, performance-based agreements for energy or water conservation improvements in residential units of multifamily buildings.

**Section 1003. Coordination of energy retrofitting assistance for schools.** Directs the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) to coordinate and disseminate information on existing Federal programs that may be used to help initiate, develop, and finance energy efficiency, renewable energy, and energy retrofitting projects for schools.

**Section 1004. Energy efficiency retrofit pilot program.** Directs the Secretary of Energy to establish a pilot program to award grants for the purpose of retrofitting nonprofit buildings with energy-efficiency improvements.

**Section 1005. Utility energy service contracts.** Amends Section 546 of the National Energy Conservation Policy Act (NECPA) to extend the maximum potential contract period of utility energy service contracts from 10 to 25 years.

**Section 1006. Use of energy and water efficiency measures in Federal buildings.** Amends contracting authority and reporting in NECPA to encourage Federal agencies to enter into energy savings performance contracts and utility energy service contracts to implement energy and water conservation measures at Federal buildings.

**Section 1007. Building training and assessment centers.** Directs the Secretary of Energy to provide grants to institutions of higher education and Tribal Colleges or Universities to establish building training and assessment centers.

**Section 1008. Career skills training.** Directs the Secretary of Energy to provide grants to eligible entities for a portion of career skills training programs that lead to students receiving industry-related certification to install energy efficient building technologies.

**Section 1009. Energy-efficient and energy-saving information technologies.** Amends Section 543 of NECPA by adding a section that directs the Director of the Office of Management and Budget (OMB) to collaborate with each Federal agency to develop an implementation strategy for the maintenance, purchase, and use of energy-efficient and energy-saving information technologies.

**Section 1010. Availability of funds for design updates.** Amends Section 3307 of Title 40 of the U.S. Code to allow the Administrator of General Services to use appropriated funds to update the design of a building for which the design has been substantially completed but on which construction has not begun to meet applicable Federal building energy efficiency standards.

**Section 1011. Energy efficient data centers.** Amends Section 453 of the Energy Independence and Security Act (EISA) of 2007 to update the Voluntary National Information Program. Requires the development of a metric for data center energy efficiency, and the Secretary of Energy and Director of OMB to maintain a data center energy practitioner program and open data initiative for Federal data center energy usage.

**Section 1012. Weatherization Assistance Program.** Amends Section 422 of ECPA to reauthorize the Weatherization Assistance Program. Amends Section 414 of ECPA to require the Secretary of Energy to provide competitive grants for eligible multi-state housing and energy nonprofit organizations with accredited contractors to conduct housing energy retrofits for low-income persons.

**Section 1013. Reauthorization of State energy program.** Amends Section 365(f) of Energy Policy Conservation Act (EPCA) to reauthorize the State Energy Program.

**Section 1014. Smart building acceleration.** Directs the Secretary of Energy to establish the 'Federal Smart Building Program' to demonstrate the costs and benefits of implementing smart building technology.

**Section 1015. Repeal of fossil phase-out.** Amends Section 305(a)(3) of ECPA to remove the requirement to phase out fossil fuel use in Federal buildings by 2030.

**Section 1016. Federal building energy efficiency performance standards.** Amends Section 303 of ECPA to include major renovations. Amends Section 305(a)(3) of ECPA to require the Secretary of Energy to establish revised Federal building energy efficiency performance standards.

**Section 1017. Codification of Executive Order.** Directs the head of each Federal agency to reduce their building energy intensity by 2.5 percent per year for fiscal years 2016 through 2025.

**Section 1018. Certification for green buildings.** Amends Section 305 of ECPA to direct the Secretary of Energy to determine which certification systems for green commercial and residential buildings are the most likely to encourage a comprehensive and environmentally sound approach to the certification of green buildings.

**Section 1019. High performance green federal buildings.** Amends Section 436(h) of EISA 2007 to require the Federal Director to identify and provide to the Secretary of Energy a list of certification systems most likely to encourage a comprehensive and environmentally sound approach to certification of green buildings.

### **Subtitle B—Appliances**

**Section 1101. Extended product system rebate program.** Directs the Secretary of Energy to establish a rebate program to encourage the replacement of energy inefficient electric motors.

**Section 1102. Energy efficient transformer rebate program.** Directs the Secretary of Energy to establish a rebate program to encourage the replacement of energy inefficient transformers.

**Section 1103. Standards for certain furnaces.** Amends Section 325(f)(4) of EPCA to add a process to determine if a nationwide requirement for a condensing furnace efficiency standard is technically feasible and economically justified.

**Section 1104. Third-party certification under Energy Star program.** Amends Section 324A of EPCA by directing the Administrator to revise the certification requirements for Energy Star program partners that have complied with all program requirements for at least 18 months.

### **Subtitle C—Manufacturing**

**Section 1201. Manufacturing energy efficiency.** Amends Section 452 of EISA 2007 to add the ‘Future of Industry Program’ and ‘Sustainable Manufacturing Initiative.’ These programs will streamline Federal manufacturing efforts by directing Industrial Assessment Centers to coordinate with other Federal manufacturing programs, National Laboratories, and energy service and technology providers, and directing DOE’s Office of EERE to provide onsite technical assessments to manufacturers seeking efficiency opportunities.

**Section 1202. Leveraging existing Federal agency programs to assist small and medium manufacturers.** Directs the Secretary of Energy to expand the scope of technologies covered by the Industrial Assessment Centers of the Department to include smart manufacturing technologies and practices and equip the Centers’ Directors with the tools and training to provide technical assistance in smart manufacturing to manufactures.

**Section 1203. Leveraging smart manufacturing infrastructure at National Laboratories.** Directs the Secretary of Energy to study and then implement ways for small and medium manufacturers to access the high-performance computing facilities at National Laboratories.

## **TITLE II—INFRASTRUCTURE**

### **Subtitle A—Cybersecurity**

**Section 2001. Cybersecurity threats.** Provides the Secretary of Energy with emergency authority to protect the bulk-power system (BPS) from cybersecurity threats.

- Upon Presidential notification that immediate action is necessary to protect the BPS, the Secretary is authorized to require any entity that is registered with the nation's Electric Reliability Organization (ERO) as an owner, operator, or user of the BPS, to take such actions as the Secretary determines to be necessary.
- In exercising this new emergency authority, the Secretary is encouraged to coordinate with Canada and Mexico and to consult with the ERO as well as those entities registered with it, the Electricity Sub-sector Coordinating Council, and other federal officials as appropriate.
- Directs Federal Energy Regulatory Commission (FERC) to adopt regulations to permit entities subject to an emergency order under this section to seek recovery of prudently-incurred costs required to implement actions ordered by the Secretary. Any rate or charge approved under the regulations must be just and reasonable and not unduly discriminatory or preferential.
- Limits the duration of emergency orders to an initial 30-day period that may be extended to no more than a 90-day period.

**Section 2002. Enhanced grid security.**

- Codifies the Department of Energy as the Sector-Specific Agency for cybersecurity for the energy sector and specifies the Department's duties with regard to that role.
- Directs the Secretary to carry out a research, development, and demonstration program to develop advanced cybersecurity applications and technologies and to leverage electric grid architecture as a means to assess risk to the energy sector. Further directs the Secretary to perform pilot demonstration projects for new technologies and to develop workforce curricula for energy sector-related cybersecurity.
- Directs the Secretary to carry out a program for cyberresilience component testing, as well as a program for cyberresilience operational support.
- Directs the Secretary to model and assess energy infrastructure risk by developing an advanced energy security program to secure energy networks.
- Directs the Secretary, in consultation with FERC and the nation's ERO, to conduct a study to explore alternative management structures and funding mechanisms to expand industry membership and participation in the ES-ISAC.

**Subtitle B—Strategic Petroleum Reserve**

**Section 2101. Strategic Petroleum Reserve test drawdown and sale notification and definition change.** Amends Section 161 of EPCA to require DOE to notify Congress prior to any Strategic Petroleum Reserve (SPR) test sale, with an exception for emergency drawdowns, and to submit a report following any sale. Amends Section 3 of EPCA to include terrorism as a qualifying cause of severe energy disruption.

**Section 2102. Strategic Petroleum Reserve mission readiness optimization.** Requires DOE to conduct a strategic review of SPR and develop proposals related to its role in national policy, relevant legal authorities, configuration and performance, and long-term effectiveness.

**Section 2103. Strategic Petroleum Reserve modernization.** Reaffirms the continuing strategic importance and need for the Strategic Petroleum Reserve and clarifies the purposes authorized

for the obligation of funds in the SPR Petroleum Account.

### **Subtitle C—Trade**

**Section 2201. Action on applications to export liquefied natural gas.** Requires the Secretary of Energy to issue a final decision, approving or disapproving, any application to export natural gas to countries that do not have free trade agreements with the United States no later than 45 days after the Federal Energy Regulatory Commission or Maritime Administration has concluded the review required by NEPA. Grants, to the U.S. Court of Appeals for the District of Columbia Circuit or the circuit in which the liquefied natural gas export facility will be located, original and exclusive jurisdiction over any civil action for the review of an order issued by the Secretary with respect to such an application or the Secretary's failure to issue a final decision on such an application. Provides for expedited consideration of civil actions brought under the section, and, in the case of covered applications, provides for the transfer of petitions for review upon the motion of an applicant.

**Section 2202. Public disclosure of liquefied natural gas export destinations.** Amends Section 3 of the Natural Gas Act to require DOE to collect data on exports of liquefied natural gas. Requires that this data be made public.

**Section 2203. Energy data collaboration.** Requires the Energy Information Administration (EIA) to collaborate with Mexican and Canadian officials to improve the collection of cross-border energy data and provide periodic updates to the Congressional committees of jurisdiction.

### **Subtitle D—Electricity and Energy Storage**

**Section 2301. Grid storage program.** Directs the Secretary of Energy to conduct a research, development, and demonstration program for electric grid energy storage to address challenges identified in the 2013 DOE Strategic Plan for Grid Energy Storage.

**Section 2302. Electric system grid architecture, scenario development, and modeling.** Requires the Secretary of Energy to establish a collaborative process to develop model grid architecture and a set of future scenarios for the electric system to examine the impacts of different combinations of resources and then determine whether the creation of any additional standards for ensuring the interoperability of the grid system and associated communications networks are required.

**Section 2303. Technology demonstration on the distribution system.** Directs the Secretary of Energy to establish a grant program to carry out eligible projects related to the modernization of the electric grid.

**Section 2304. Hybrid micro-grid systems for isolated and resilient communities.** Requires the Secretary of Energy to establish a program to promote the development of hybrid micro-grid systems for isolated communities and micro-grid systems to increase the resilience of critical infrastructure.

**Section 2305. Voluntary model pathways.** Requires the Secretary of Energy to initiate

development of voluntary model pathways for modernizing the electric grid through a collaborative public-private effort to facilitate certain objectives, and establishes a Steering Committee to facilitate the development.

**Section 2306. Performance metrics for electricity infrastructure providers.** Requires the Secretary of Energy to submit to Congress within two years after enactment a report that includes an evaluation of the performance of the electric grid in light of metrics to be developed and a description of the costs and benefits associated with certain evaluated scenarios developed under section 2302.

**Section 2307. State and regional distribution planning.** Upon the request of a State, requires the Secretary of Energy to partner with States and regional organizations to facilitate development of State and regional electric distribution plans by conducting a resource assessment and developing open source tools for planning and operations. Authorizes the Secretary to provide technical assistance to States and others.

**Section 2308. Authorization of appropriations.** Provides an authorization of appropriations to carry out sections 2301 through 2307.

**Section 2309. Electric transmission infrastructure permitting.** Codifies the Interagency Rapid Response Team for Transmission to improve the efficiency of electric transmitting infrastructure permitting. Establishes the position of Transmission Ombudsperson within Council on Environmental Quality (CEQ) to resolve delays and complaints related to the electric transmission infrastructure permitting process.

**Section 2310. Report by transmission organizations on distributed energy resources and micro-grid systems.** Requires Transmission Organizations to submit a report to FERC within six months identifying barriers to their deployment of distributed energy systems and micro-grid systems, as well as potential changes to the operational requirements for, or the charges associated with, the interconnection of these resources to the Transmission Organization.

**Section 2311. Net metering study guidance.** Amends Title 18 of the Energy Policy Act (EPACT) of 2005 and requires the Secretary of Energy to issue guidance on criteria for net metering studies conducted by the Department.

### **Subtitle E—Computing**

**Section 2401. Exascale computer research program.** Requires the Secretary of Energy to conduct a research program, and establish two or more National Lab partnerships with industry and institutes of higher education, to develop two or more exascale computing systems at DOE.

## **TITLE III—SUPPLY**

### **Subtitle A—Renewables**

#### **PART I—Hydroelectric**

**Section 3001. Hydropower regulatory improvements.**

- Designates FERC as the lead agency to set a binding schedule and coordinate all needed federal authorizations in order to address hydropower permitting backlogs. Further authorizes the Chairman of CEQ to resolve any interagency disputes to ensure timely participation and decision-making by the resource agencies.
- Sets forth a Sense of Congress that hydropower is a renewable resource for purposes of all Federal programs.
- Amends the federal purchasing requirement in EPACT 2005 to include all forms of hydropower and raises the federal purchase requirement for renewable energy from 7.5 to 15 percent.
- Requires a resource agency's mandatory condition or prescription to have a "clear and direct nexus" to the actual project works.
- Extends preliminary permit terms from three years to four years and lengthens the subsequent potential FERC extension from two years to four years.
- Extends the construction start time for projects from two years for an additional eight years.
- Directs FERC to compile and make public a comprehensive collection of studies and data; to use existing studies in individual licensing proceedings; and to ensure that studies required for federal authorizations are not duplicated. Also encourages the development of a limited number of open-source methodologies and tools, including water balance models and streamflow analyses.
- Requires the concurrent preparation of biological opinions and starts the clock for water quality certifications when the request for certification is determined to be complete.
- Requires FERC to maintain an official consolidated record of a licensing proceeding, including the contributions made by other federal agencies.
- Requires a resource agency to demonstrate, in writing, that it has met the "equal consideration" requirement when imposing mandatory conditions or prescriptions.
- Makes a number of improvements to the Trial-Type Hearing (TTH) process, including requiring FERC's existing Administration Law Judges (ALJ) to handle the TTH; extending time limit for a TTH from 90 to 120 days; and allowing an ALJ to stay the TTH for 120 days for settlement discussions.
- Directs FERC to establish a voluntary pilot program covering at least one region to consider a region-wide approach to hydropower licensing.

**Section 3002. Hydroelectric production incentives and efficiency improvements.** Extends the incentives for hydroelectric production and efficiency improvements contained in EPACT 2005 through Fiscal Year 2025.

**Section 3003. Extension of time for a Federal Energy Regulatory Commission project involving Clark Canyon Dam.** Reinstates the FERC hydropower license for Clark Canyon Dam in Montana and extends the project start time for construction for three years.

**Section 3004. Extension of time for a Federal Energy Regulatory Commission project involving Gibson Dam.** Authorizes FERC to extend the project start time for construction of the Gibson Dam in Montana for six years.

## **PART II—Geothermal**

### **Subpart A—Geothermal Energy**

**Section 3005. National goals for production and site identification.** Provides a Sense of Congress for geothermal energy urging the Secretary of Energy to “significantly increase” geothermal production from federal lands, while asking the U.S. Geological Survey (USGS) to identify sites capable of producing 50,000 megawatts of geothermal power using the full range of available technologies, within 10 years.

**Section 3006. Priority areas for development on Federal land.** Directs the Bureau of Land Management to identify high priority areas for geothermal development and to facilitate required leasing and development.

**Section 3007. Facilitation of coproduction of geothermal energy on oil and gas leases.** Amends Section 4(b) of the Geothermal Steam Act of 1970 to allow geothermal development by co-production of electricity from oil and gas leases on federal lands using geothermal technologies.

**Section 3008. Noncompetitive leasing of adjoining areas for development of geothermal resources.** Amends Section 4(b) of the Geothermal Steam Act of 1970 to set up a noncompetitive leasing process where existing geothermal leaseholders on federal lands can move to lease adjoining lands administratively without rebidding. Sets the fair market value per acre that must be paid to gain such leases, sets minimum and maximum lease prices, lists the standards that must be met by lessees to gain lands, and limits the amount of land that can be acquired without competitive bids.

**Section 3009. Large-scale geothermal energy.** Amends EISA 2007 to authorize the Secretary of Energy to conduct additional types of research involving geothermal energy technologies. Defines the specific types of research that may be conducted, details how entities can apply for grants to conduct demonstration projects, and authorizes research into the environmental impacts of such technologies.

**Section 3010. Report to Congress.** Requires the Secretary of Energy to report to Congress within three years on the progress made by research into geothermal technologies and requires an additional report every five years thereafter.

**Section 3011. Authorization of appropriations.** Provides an authorization of appropriations for Subpart A of Part II of Title III.

### **Subpart B—Geothermal Exploration**

**Section 3012. Geothermal exploration test projects.** Amends the Geothermal Steam Act of 1970 to allow for the use of a categorical exclusion to the National Environmental Policy Act of 1969 (NEPA) to permit geothermal exploration test wells to be drilled. Limits when the exclusion can be in place by acreage and environmental impacts and requires complete

restoration of any site within three years. Allows the relevant Secretary to deny any exclusion based on “extraordinary circumstances” as defined by existing regulations. Includes review and public notice provisions.

### **PART III—Marine Hydrokinetic**

**Section 3013. Definition of marine and hydrokinetic renewable energy.** Amends Section 632 of EISA 2007 to revise the definition of marine hydrokinetic energy, broadening it beyond only electrical energy.

**Section 3014. Marine and hydrokinetic renewable energy research and development.** Amends both EPACT 2005 and EISA 2007 to revise DOE’s authorizations for research, development, and demonstration programs and commercial application efforts involving marine hydrokinetic technology to cover current, tidal, wave, and thermal technologies. Defines allowable research areas, coordinates research, and allows for support of in-water demonstrations of technologies and for partnerships with international entities, research centers, and businesses.

**Section 3015. National Marine Renewable Energy Research, Development, and Demonstration Centers.** Amends EISA 2007 to authorize the National Marine Renewable Energy Research, Development and Demonstration Centers to participate in demonstration projects, support in-water testing, support arrays of technology devices, and serve as information clearinghouses.

**Section 3016. Authorization of appropriations.** Amends EISA 2007 to reauthorize federal funding for marine hydrokinetic research.

### **PART IV—Biomass**

#### **Section 3017. Biopower.**

- Amends Section 9008 of the Farm Security and Rural Investment Act of 2002 to provide research assistance for the development of biopower and bioheat projects.
- Expands the authority of the Biomass Research and Development Board to consider biopower and bioheat projects and authorizes grants to support innovation and market development of biopower and bioheat systems.
- Requires the Secretaries of Agriculture and Energy to set up two working groups to collaborate on project implementation and to share best practices.
- Establishes a low-interest loan program in the Department of Agriculture’s Rural Development Office to support the construction of residential, commercial or institutional and industrial bioheat systems.
- Permits loans for bioheat and biopower residential, commercial or institutional, and industrial wood energy systems to be made under the Energy Efficiency and Conservation Loan Program under Section 2 of the Rural Electrification Act of 1936.

### **Subtitle B—Oil and Gas**

#### **Section 3101. Amendments to the Methane Hydrate Research and Development Act of**

**2000.** Amends and reauthorizes the Methane Hydrate Research and Development Act of 2000. Authorizes basic and applied research to identify, explore, assess, and develop methane hydrate as a commercially viable source of energy and to identify the environmental, health, and safety impacts of such development. Authorizes the identification of methane hydrate concentrations in the Gulf of Mexico and Atlantic Basin. Authorizes basic and applied research, expanded education and training programs in methane hydrate resource research, and long-term environmental monitoring and research programs into the effects of the production of methane hydrate reservoirs.

### **Subtitle C—Helium**

**Section 3201. Rights to helium.** Amends the Mineral Leasing Act to repeal the Federal government’s reservation of the first right to helium located on leased lands. Provides the first right of refusal to explore for helium on leased lands to the lessee.

### **Subtitle D—Critical Minerals**

**Section 3301. Definitions.** Provides definitions for the subtitle.

**Section 3302. Policy.** Amends Section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 to modernize the congressional declaration of federal mineral policies.

**Section 3303. Critical mineral designations.** Requires the Secretary of the Interior, acting through the Director of the USGS, to establish a methodology for the designation of critical minerals based on the potential for supply disruptions and the importance of their use. Requires the list of critical minerals to be reviewed and updated at least every three years.

**Section 3304. Resource assessment.** Requires the Secretary of the Interior, in coordination with State geological surveys, to identify and quantify critical mineral resources throughout the United States within four years. Requires a report on the status of geological surveying for any mineral on which the United States is more than 25 percent import dependent, but which is not designated as a critical mineral.

**Section 3305. Permitting.** Outlines a series of performance improvements and reporting requirements to reduce delays in the federal permitting process for mines that will produce critical minerals. Requires the development of a performance metric to evaluate progress made in improving permitting efficiency. Directs OMB to include mining projects on the Federal Infrastructure Projects Permitting Dashboard. Requires a report from the Small Business Administration on regulations affecting the critical minerals industry.

**Section 3306. Federal Register process.** Requires Federal Register notices to be completed within 45 days, prepared at the organization level of the agency, and transmitted from the office in which the documents or meetings are held or the activity is initiated.

**Section 3307. Recycling, efficiency, and alternatives.** Directs the Secretary of Energy to

conduct a program of research and development to promote the efficient production, use, and recycling of critical minerals throughout the supply chain, and to develop alternatives to critical minerals that do not occur in significant abundance in the United States.

**Section 3308. Analysis and forecasting.** Directs the Secretary of the Interior, in consultation with EIA, to establish a forecasting capability for critical mineral reliance, production, price, recycling, and related factors. Requires a new “Annual Critical Minerals Outlook” and protects proprietary data.

**Section 3309. Education and workforce.** Provides for a workforce assessment, curriculum development, and programs related to critical minerals at institutions of higher education.

**Sec.3310. National geological and geophysical data preservation program.** Reauthorizes the program created by Section 351 of EPACT 2005.

**Section 3311. Administration.** Repeals the National Critical Materials Act of 1984, makes conforming amendments, and provides two savings clauses related to the effect of the critical minerals subtitle.

**Section 3312. Authorization of appropriations.** Provides an authorization of appropriations for subtitle D.

#### **Subtitle E—Coal**

**Section 3401. Fossil energy.** Amends Section 961(a) of EPACT 2005 to include improvement of conversion, use, and storage of carbon dioxide produced from fossil fuels as an objective in the research, development, demonstration, and commercial application programs for fossil energy at the Department of Energy.

#### **Subtitle F—Nuclear**

**Section 3501. Report on fusion and fission reactor prototypes.** Requires a report on fusion and fission reactor prototypes. Requires DOE to submit a report to Congress that assesses its capability to host privately-funded fusion and fission reactor prototypes at DOE-owned sites.

#### **Subtitle G—Workforce Development**

**Section 3601. 21st Century Energy Workforce Advisory Board.** Establishes the 21<sup>st</sup> Century Energy Workforce Advisory Board at DOE to develop a strategy for the support and development of a skilled workforce to meet current and future energy sector needs.

**Section 3602. Energy workforce pilot grant program.** Establishes a three year pilot program to award competitive grants for job training programs that lead to an industry-recognized credential.

#### **Subtitle H—Recycling**

**Section 3701. Recycled carbon fiber.** Directs the Secretary of Energy to conduct a comprehensive study on the recycling of carbon fiber and production waste carbon fiber. Upon completion of the study, directs the Secretary to develop a recycled carbon fiber demonstration project.

## TITLE IV—ACCOUNTABILITY

### Subtitle A—Loan Programs

**Section 4001. Terms and conditions for incentives for innovative technologies.** Amends Section 1702 of EPACT 2005 to require that borrowers pay no less than 25 percent of the cost of the credit subsidy for a guarantee and directs the Secretary of Energy to provide an estimate or range for the expected cost as soon as practicable. Amends Section 1702 of EPACT 2005 to clarify and reaffirm the current prohibition on subordination of debt. Increases the transparency of the Section 1703 loan guarantee program by establishing a process for the borrower to request the status of their application directly from DOE. Repeals the temporary loan program under Section 1705 of EPACT 2005.

**Section 4002. State loan eligibility.** Amends Section 1701 of EPACT 2005 to clarify eligibility for State energy financing institutions and establishes terms and conditions for their participation in the Section 1703 loan guarantee program.

**Section 4003. GAO Study on fossil loan guarantee incentive program.** Directs the Comptroller General of the United States to conduct a report on the effectiveness of DOE’s advanced fossil loan guarantee program and other incentive programs for advanced fossil energy at the Department.

**Section 4004. Program eligibility for vessels.** Authorizes projects for the reequipping, expanding, or establishing of a manufacturing facility in the United States to produce vessels to be eligible for the Advanced Technology Vehicles Manufacturing (ATVM) program established by Section 136 of EISA 2007. Prohibits the use of any existing credit subsidy and requires either new appropriations or borrowers to self-pay the credit subsidy associated with their projects.

**Section 4005. Additional reforms.** Directs DOE to issue a rule that specifies energy efficiency improvement standards for the manufacturing, retrofitting, or repowering of vessels made eligible for the ATVM program. Provides DOE, consistent with its authority under the Section 1703 loan guarantee program, authority to charge fees for the ATVM program, including the ability to charge closing fees. Sunsets the ATVM program on January 1, 2023 and rescinds any remaining unobligated appropriations.

### Subtitle B—Energy-Water Nexus

**Section 4101. Nexus of energy and water for sustainability.** Establishes an Interagency Coordination Committee, co-chaired by the Secretaries of Energy and Interior, to identify all relevant energy-water nexus activities across the federal government; enhance the coordination

of research and development activities among agencies; gather and disseminate data to enable better practices; explore relevant public-private collaboration, and develop a research and development plan for energy-water nexus related programs. Establishes the Nexus of Energy and Water Sustainability (NEWS) office to provide leadership and administrative support functions for the Interagency Coordination Committee.

**Section 4102. Smart energy and water efficiency pilot program.** Amends Title IX of EPACT 2005 to establish a Smart Energy and Water Efficiency Pilot Program at DOE to provide grants to eligible utilities, municipalities, water districts as well as Indian tribes and Alaska Native villages.

### **Subtitle C—Innovation**

**Section 4201. America COMPETES programs.** Amends Section 971(b) of EPACT 2005 to authorize DOE’s Office of Science to carry out research, development, demonstration, and commercial applications activities. Reauthorizes the Advanced Research Projects Agency – Energy (ARPA-E) and provides additional protection for program participants’ proprietary information.

**Section 4202. Inclusion of early stage technology demonstration in authorized technology transfer activities.** Amends Section 1001 of EPACT 2005 to allow directors of National Labs to use technology transfer funds to carry out early stage and pre-commercial technology demonstration activities, to remove technology barriers that limit private sector interest, and to demonstrate potential commercial applications of any research and technologies arising from National Lab activities.

**Section 4203. Supporting access of small business concerns to National Laboratories.** Requires the Secretary of Energy to create a website relating to National Lab programs available to small business concerns in order to facilitate access to the National Labs and the promotion of technology transfer of innovative energy technologies.

### **Subtitle D—Grid Reliability**

**Section 4301. Bulk-power system reliability impact statement.** Amends Section 215 of the Federal Power Act to require: (i) regional reliability entities to submit to Congress and FERC within six months after enactment, and every three years thereafter, a report that describes the state of and prospects for electric reliability within the region; (ii) with respect to major federal rules that may significantly affect the reliable operation of the bulk power system, the submission to the Commission, for transmittal to the agency issuing the rule, a statement on the impact of the proposed rule on the reliable operation of the bulk power system – a Reliability Impact Statement (RIS); and (iii) inclusion, by the agency issuing the rule, of a detailed response to the RIS in the final rule.

**Section 4302. Report by transmission organizations on diversity of supply.** Requires Transmission Organizations to submit a report to FERC within six months that identifies, describes, and evaluates the electric capacity resources available to the Transmission

Organization; assesses the current and projected state of reliability; and assesses whether and to what extent the market rules of the Transmission Organization meet a series of criteria related to wholesale electric prices, diversity of generation, and availability of self-supply of electric capacity resources by public power entities.

**Section 4303. Activities carried out during an authorization during war or emergency.**

Amends Section 202(c) of the Federal Power Act to provide, subject to exceptions, a waiver of liability for actions carried out in compliance with an order under that section or under Section 224(b)(1). This would include generation, delivery, interchange, or transmission of electric energy ordered to be provided during a war or to meet an emergency such as an imminent threat to electric reliability.

**Subtitle E—Management**

**Section 4401. Federal land management.** Authorizes the Secretary of the Interior to establish a “cadastre,” or computerized inventory of buildings and other real property (land), including associated infrastructure such as roads and utility systems and pipelines, collected from surveys, maps, charts and inventories that will be stored as digital data. Authorizes the Secretary to enter into discussions with other federal agencies to utilize the data inventory system to keep track of their holdings, and authorizes the development of cost-sharing agreements so that states, local governments, and Indian tribes may also utilize the inventory system. Outlines the coordination involved in collecting and creating the geographical (data) information system that will store the inventories. Requires that the information be kept in a graphically geo-enabled and searchable format available to the public on the Internet, provided that the identity of any buildings and facilities that would impair or jeopardize national security or homeland defense are withheld from public disclosure. Outlines how the system will be operated and clarifies that nothing in the provision requires any new appraisals or assessments of federal assets for any purpose.

**Section 4402. Quadrennial Energy Review.** Amends Section 801 of the DOE Organization Act to require the President to establish a Quadrennial Energy Review Task Force comprising high-level agency officials. Requires this task force to conduct a DOE-supported review of national energy policy every four years.

**Section 4403. State oversight of oil and gas programs.** Adds a new section requiring the Secretary of the Interior to establish a program through which the Bureau of Land Management and a State, upon the request of the Governor of the State, can enter into a memorandum of understanding to consider the costs and benefits of creating consistent rules and processes governing oil and gas production activities on federal lands in the State.

**Section 4404. Under Secretary for Science and Energy.** Makes conforming amendments to the DOE Organization Act and other relevant acts to reflect the current title for this position.

**Subtitle F—Markets**

**Section 4501. Enhanced information on critical energy supplies.** Amends Section 205 of the DOE Organization Act to require EIA to cooperate with the Commodity Futures Trade

Commission to collect data on physical oil inventories owned by commodities traders and commercial oil and gas storage capacity. Establishes a Financial Market Analysis Office within EIA.

**Section 4502. Working Group on Energy Markets.** Establishes a Working Group on Energy Markets composed of high-level agency officials chaired by the Secretary of Energy. The Working Group shall investigate the effects of financial investment in energy commodities and issue recommendations to the President and Congress if necessary.

**Section 4503. Study of regulatory framework for energy markets.** Requires the Working Group on Energy Markets to conduct a study about the pricing of crude oil and refined products and to provide to the Congressional committees of jurisdiction recommendations concerning Federal oversight and regulatory action related to transparency and excessive speculation.

### **Subtitle G—Affordability**

**Section 4601. E-prize competition pilot program.** Amends Section 1008 of EPACT 2005 to add an E-prize Competition Pilot Program. Requires the Secretary of Energy to establish an e-prize competition or challenge pilot program to implement sustainable community and regional energy solutions that seek to reduce energy costs through increased efficiency, conservation, or technology innovation in high-cost regions. Provides for a prize purse to be awarded by the Secretary, in amounts determined by the Secretary, through one or more competitions or challenges.

### **Subtitle H—Code Maintenance**

**Section 4701. Repeal of off-highway motor vehicles study.** Repeals an outdated study.

**Section 4702. Repeal of methanol study.** Repeals an outdated study.

**Section 4703. Repeal of authorization of appropriations provision.** Repeals expired authorizations.

**Section 4704. Repeal of residential energy efficiency standards study.** Repeals an outdated study.

**Section 4705. Repeal of weatherization study.** Repeals an outdated study.

**Section 4706. Repeal of report to Congress.** Repeals an outdated report.

**Section 4707. Repeal of certain reports.** Repeals an outdated report.

**Section 4708. Repeal of report by General Services Administration.** Repeals an outdated report.

**Section 4709. Repeal of intergovernmental energy management planning and coordination**

**workshops.** Repeals an outdated requirement for intergovernmental workshops.

**Section 4710. Repeal of Inspector General audit survey and President’s Council on Integrity and Efficiency report to Congress.** Repeals an outdated Inspector General audit and an outdated report.

**Section 4711. Repeal of procurement and identification of energy efficient products program.** Repeals an outdated program at DOE.

**Section 4712. Repeal of national action plan for demand response.** Repeals an outdated report and expired authorization.

**Section 4713. Repeal of national coal policy study.** Repeals an outdated study.

**Section 4714. Repeal of study on compliance problem of small electric utility systems.** Repeals an outdated study.

**Section 4715. Repeal of study of socioeconomic impacts of increased coal production and other energy development.** Repeals an outdated study.

**Section 4716. Repeal of study of the use of petroleum and natural gas in combustors.** Repeals an outdated study.

**Section 4717. Repeal of submission of reports.** Repeals outdated reporting requirements.

**Section 4718. Repeal of electric utility conservation plan.** Repeals an outdated requirement for electric utilities to submit a plan to Congress.

**Section 4719. Emergency Energy Conservation repeals.** Repeals outdated findings and requirements for minimum purchases of gasoline and associated fines in the event of a violation.

**Section 4720. Energy Security Act repeals.** Repeals outdated provisions related to biomass and the use of gasohol in federal motor vehicles.

**Section 4721. Nuclear Safety Research, Development, and Demonstration Act of 1980 repeals.** Repeals outdated studies.

**Section 4722. Elimination and consolidation of certain America COMPETES programs.** Repeals unused or outdated America COMPETES program authorities and consolidates other duplicative authorities.

## **TITLE V—CONSERVATION REAUTHORIZATION**

**Section 5001. National Park Service Maintenance and Revitalization Conservation Fund.** Establishes a National Park Service Critical Maintenance and Revitalization Conservation Fund to address high-priority deferred maintenance needs of the National Park Service with a

prohibition on the use of funds for land acquisition.

**Section 5002. Land and Water Conservation Fund.** Permanently reauthorizes the Land and Water Conservation Fund. Specifies the way in which funds may be allocated; adding two new set-asides: one for hunting, fishing, or other recreational purposes and another for recreation and conservation programs important to states. In making federal land acquisitions, the Secretaries shall consider conservation easements and are required to take into account certain considerations in determining which land or interests in land to acquire.

**Section 5003. Historic Preservation Fund.** Permanently reauthorizes the Historic Preservation Fund.