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ONE HUNDRED FOURTEENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

July 21, 2015

To: Subcommittee on Energy and Power Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Subcommittee Markup of H.R. __, a bill "to modernize energy infrastructure, build a 21st century energy and manufacturing workforce, bolster America's energy security and diplomacy, and promote energy efficiency and government accountability, and for other purposes"

On Wednesday, July 22, 2015, at 10:00 a.m. in room 2123 of the Rayburn House Office Building, the Subcommittee on Energy and Power will hold a markup of H.R. __, a bill "to modernize energy infrastructure, build a 21st century energy and manufacturing workforce, bolster America's energy security and diplomacy, and promote energy efficiency and government accountability, and for other purposes."

I. BACKGROUND

Throughout the 114th Congress, the Subcommittee on Energy and Power has held numerous hearings on legislative proposals related to the majority's "Architecture of Abundance." The Committee Print being marked up by the subcommittee was released by the majority on July 20, 2015, and represents a subset of those proposals that have bipartisan support.[1] This memo outlines the changes made to the provisions contained in the Committee Print. For additional background information regarding all the provisions from the various discussion drafts, please see the democratic memos from the corresponding hearings: Title II: 21st Century Workforce; Hydropower Regulatory Modernization and FERC Process Coordination; .Energy Reliability and Security; Energy Diplomacy; and Title

[1] House Committee on Energy and Commerce, *After Months of Work to Embrace Nation's Energy Potential, Subcommittee to Vote This Week on First Steps Toward a Broad Legislative Package* (Jul. 20, 2015) (online at energycommerce.house.gov/press-release/after-months-work-embrace-nation%E2%80%99s-energy-potential-subcommittee-vote-week-first-steps).

IV: Accountability.

II. ANALYSIS

A section-by-section summary and analysis of the Committee Print follows:

A. Section 1101: FERC Process Coordination

The Committee Print makes significant changes to section 1101. This section was previously intended to reform the siting review process for natural gas pipelines at the Federal Energy Regulatory Commission (FERC). The previous version of this section directed FERC to select which agencies are to participate in the review process, and establish deadlines for them in completing their consideration of pipeline applications.

Changes made by the Committee include:

- Directing FERC to notify, rather than formally invite, any agency that may consider an aspect of a natural gas pipeline application;
- Directs FERC to make recommendations on the appropriate scope of environmental review;
- Removes the provision related to issue resolution meetings; and
- Removes the provision allowing applicants to provide additional funding to aid FERC in the review of permit applications.

B. Section 1102: Resolving Environmental and Grid Reliability Conflicts

Section 1102 contains text identical to H.R. 1558, the "Resolving Environmental and Grid Reliability Conflicts Act of 2015," which was introduced on March 24, 2015, by Representatives Olson, Green and Doyle. The House passed, by voice vote an identical version of this legislation on May 22, 2013.[2]

The Committee Print makes no changes to this section.

Section 1102 amends section 202(c) of the Federal Power Act (FPA)[3] to direct the

[2] U.S. House of Representatives, Voice Vote on Agreeing to H.R. 271 (May 22, 2013); H.R. 271, the "Resolving Environmental and Grid Reliability Conflicts Act of 2013," 113th Cong. (2013).

[3] Section 202(c) of the Federal Power Act provides the Secretary of Energy with the authority to require the generation, transmission, or delivery of electricity, or the temporary connection of facilities when there is a war or other emergency situation that creates a sudden increase in the demand for electricity, a shortage of electricity or facilities for the generation or transmission of electricity, or a shortage of fuel or water for generating facilities. This emergency order authority has only been used on six occasions, only two of which involved ordering generation facilities to run.

Department of Energy (DOE), in issuing an emergency order that may result in a conflict with a requirement of any federal, state, or local environmental law or regulation, to ensure that the order limits the generation, delivery, or transmission of electricity to only those hours necessary to meet the emergency and serve the public interest. DOE also must ensure the order, to the maximum extent practicable, is consistent with any applicable federal, state, or local laws or regulations and minimizes any adverse environmental impacts that may result from such order.

C. Section 1103: Emergency Preparedness For Energy Supply Disruptions

Section 1103 authorizes the Secretary of Energy to develop and implement procedures to enhance emergency preparedness for natural disasters. In doing so, DOE is directed to collaborate with state and local governments, as well as the private sector. Actions to enhance emergency preparedness include improving lines of communication and cooperation during emergencies, facilitating engagement in developing state and local energy assurance plans, and establishing education and training programs for emergency response positions.

The Committee Print makes no changes to this section.

D. Section 1104: Critical Energy Infrastructure Security

Section 1104 amends the Federal Power Act (FPA) to add a new section 215A, granting new federal authorities intended to protect grid reliability or defense critical electric infrastructure, against grid security emergencies.

This section is similar to a bipartisan bill that the committee considered and the House of Representatives passed in the 111th Congress.[4] While the proposal provides some improvement over current law, it lacks a number of provisions that could undermine its effectiveness in ensuring grid security. Importantly, it does not grant DOE or FERC any additional authority to address vulnerabilities or threats to the grid, just emergencies. For instance, acts or events that were previously considered to be threats or vulnerabilities, and thus covered by the regulatory authorities in the legislation, may no longer be addressed by the provisions of section 1104. Under this section, acts or events must pose an imminent danger to the grid in order to be considered, setting a much higher bar for regulatory action.

The Committee Print did make changes to reflect DOE's role in ensuring and protecting grid security, and allows FERC to address grid events that have actually occurred. The majority and minority staffs have committed to continue negotiations on this section to help strengthen its provisions prior to full committee consideration.

[4] U.S. House of Representatives, Voice Vote on Agreeing to H.R. 5026 (Jun. 9, 2010). The "Grid Reliability and Infrastructure Defense (GRID) Act," was originally introduced by Reps. Markey and Upton.

E. Section 1105: Strategic Transformer Reserve

Section 1105 requires the Secretary of Energy, in consultation with the Electric Reliability Organization, to prepare and submit to Congress a plan to establish a Strategic Transformer Reserve (STR). Under the STR plan, a sufficient number of spare large power transformers (LPTs) are to be stored at strategically located facilities to temporarily replace critically damaged LPTs and restore megawatt capacity in cases of physical attack, cyber-attack, electromagnetic pulse attack, geomagnetic disturbances, severe weather; or seismic events.

The Committee Print changes section 1105 by establishing the STR six months after DOE's plan is submitted to Congress.

F. Section 1106: Cyber Sense

Section 1106 requires the Secretary of Energy to establish, in consultation with FERC and the National Institute of Standards and Technology (NIST), a voluntary Cyber Sense program to identify and promote cyber-secure products and technologies intended for use in the bulk-power system. The Cyber Sense certification process must identify and list cyber-secure products and technologies intended for use on the grid, including products relating to industrial control systems, such as supervisory control and data acquisition systems.

The Committee Print changes section 1106 to focus the Cyber Sense program on identifying cyber-secure products, rather than certifying those products as cyber-secure.

G. Section 1107: State Consideration of Resiliency and Advanced Energy Analytics Technologies and Baseload Generation

The Committee Print includes numerous changes to section 1107. The section amends section 111 of the Public Utility Regulatory Policies Act (PURPA), which generally directs states to consider and make a determination whether or not to adopt certain federal standards.

Section 1107 establishes a new federal standard requiring each electric utility to develop plans for increased use of resiliency-related technologies and other approaches that would improve resilience and maintain the flow of power to facilities critical to public health, safety, and welfare. These plans should use "the most current data, metric, and frameworks related to current and future threats, including physical and cyber attacks, electromagnetic pulse attacks, geomagnetic disturbances, seismic events, and severe weather and other environmental stressors." Also, "all types of distributed" generation has been added to the list of resiliency-related technologies. Each electric utility would be required to commence such consideration within one year of enactment and to complete the consideration within two years. Additionally, state regulatory authorities are directed to consider allowing rate recovery for procurement and deployment of resiliency related technologies

Section 1107 also establishes a second federal standard requiring each electric utility to develop and implement a plan for deployment of advanced energy analytics technology.

State regulatory authorities are directed to consider allowing rate recovery for the procurement, deployment or use of advanced energy analytics technology, and electric utilities shall commence such consideration within six months of enactment and complete the consideration within one year.

Under a third federal standard included in section 1107, electric utilities are directed to consider adoption or modification of policies to assure reliable generation in integrated resources plans of utilities. Operational characteristics of "reliable generation" include: "possession of adequate fuel onsite, the operational ability to generate electric energy from more than one fuel source or fuel certainty that ensures adequate fuel supply." Electric utilities shall commence consideration within one year of enactment and complete consideration within two years.

H. Section 1108: Reliability and Performance Assurance in Regional Transmission Organizations

In the Committee Print, section 1108 is in brackets to represent a commitment to continuing negotiations between the majority and minority staff. No language is included as staff were unable to reach agreement in time for subcommittee consideration.

As initially drafted, section 1108 required FERC to direct Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) that operate capacity markets to demonstrate that the structure of such market is based on integrated system planning practices that meet a number of prescriptive criteria. Under the provision, the RTOs and ISOs must show that their capacity markets are based on integrated system planning practices that include a diverse and flexible generation portfolio, long term reliability and stable pricing for customers, price adequacy and certainty for power generators over a long term planning horizon, and enhanced operation performance assurance during peak demand periods.

The structure of the capacity market shall also have reliability attributes that include operational characteristics to enable generation of electricity on a continuous basis for an extended period for each day over a period of not less than 30 days. Other characteristics include "possession of adequate fuel onsite, the operational ability to generate electric energy from more than one fuel source or fuel certainty that ensures adequate fuel supply at stable pricing without risk of interruption." The types of generation that would meet the requirements set forth above would include coal, nuclear, as well as gas and hydroelectric, but not renewable technologies such as wind and solar.

I. Section 2101: 21st Century Workforce

The 21st Century Workforce directs the Secretary of Energy to establish a new program collaborating with schools, industry, unions, national labs, and workforce investment organizations to improve the education and training of women, minority, and veterans for energy and manufacturing-related jobs.

The only changes made to this section in the Committee Print involve adding wraparound services and career coaching to the section on direct assistance: "the Secretary shall provide direct assistance (including financial assistance awards, technical expertise, wraparound services, career coaching, mentorships, internships, and partnerships) to schools, community colleges, workforce development organizations, nonprofit organizations, labor organizations, apprenticeship programs, and minority serving institutions."

J. Section 3101: Energy Diplomacy, Sense of Congress

Section 3101 contains findings regarding America's "energy abundance" and the desirability of promoting "greater stability and affordability of energy supplies for its allies and trading partners through a more integrated, secure and competitive North American energy system."

The Committee Print makes minor changes to findings in this section.

K. Section 3102: Energy Security Valuation

The Committee Print includes numerous changes to section 3102, which previously created an interagency task force to "coordinate the consideration of energy related decision-making and improve planning and coordination with Canada and Mexico, including with regard to North America energy flows." As currently drafted, this section directs the Secretary of Energy to develop a report on a new valuation of energy security, taking into account a number of recommendations outlined in the Quadrennial Energy Review.

L. Section 3103: North American Energy Security Plan

The Committee Print creates a new section 3103, which was previously a component of the requirements of the interagency task force in section 3102. This new section directs the Secretary of Energy to develop and send to Congress a plan to "improve planning and coordination with Canada and Mexico to enhance energy integration, strengthen North American energy security, and promote efficiencies in the exploration, production storage, supply marketing, pricing and regulation of North American energy resources." The Committee Print also requires the plan to include consideration of improvements to U.S. collaboration with Caribbean and Central American partners.

M. Section 3104: Collective Energy Security

The Committee Print makes two changes to this section. Section 3104 now requires DOE and the Department of State to convene two international energy forums to promote U.S. energy security and that of its allies. The title of this section has also been changed from "International Energy Diplomacy," to "Collective Energy Security."

N. Section 3105: SPR Mission Readiness Plan

Section 3105 requires the Secretary of Energy, within 180 days of enactment, to conduct a strategic review of the strategic petroleum reserve (SPR), including identification of near and long-term roles for the SPR. Among other things, the Secretary is also required to develop and submit a plan to "achieve the optimal": 1) capacity, location and composition of petroleum products in the SPR; and, 2) storage and distributional capabilities of the SPR. This section also requires the plan to estimate the (financial) resources necessary for the SPR's "long-term sustainability and operational effectiveness."

The Committee Print makes no changes to this section.

O. Section 4111-4112: Energy Efficient and Energy Saving Information Technologies, and Energy Efficient Data Centers

Sections 4111 and 4112 contain the provisions of H.R. 1268, the "Energy Efficient Technology Act," sponsored by Rep. Eshoo. The language amends the Energy Independence and Security Act of 2007 (EISA) to require federal agencies to coordinate with the Office of Management and Budget (OMB), DOE and the Environmental Protection Agency (EPA) in the development of an implementation strategy for the maintenance, purchase, and use of energy-efficient and energy- saving information technologies. The provision also sets out specific items for consideration in developing an implementation strategy and requires the establishment of performance goals for evaluating the agencies' efforts.

Section 4112 amends EISA to require DOE and EPA to collaborate with stakeholders in the implementation of the data center energy efficiency program and other measures to improve data center energy efficiency. Among other things, the provision requires DOE to update a 2007 report to Congress on server and data center efficiency, as well as maintain a program to certify specialists in evaluating energy usage and efficiency opportunities in data center. The section also addresses public availability of Federal data center energy usage and efforts to harmonize global standards and metrics for data center efficiency.

The Committee Print makes no changes to these sections.

P. Section 4113; Report on Energy and Water Savings Potential from Thermal Insulation

Section 4113 contains the provisions of H.R. 568, the "Thermal Insulation Efficiency Improvement Act," introduced by Reps. Kinzinger and McNerney. The provision requires the Secretary of Energy to report within one year on the impact of thermal insulation on both energy and water use systems for potable hot and chilled water in federal buildings and on the return on investment of installing the insulation.

The Committee Print makes no changes to this section.

Q. Section 4114: Federal Purchase Requirement

Section 4114 includes multiple changes to the definition of "renewable energy" within the federal renewable energy purchase requirements established in section 203 of EPACT 2005. The first change expands the definition beyond electric energy to allow certain "thermal energy" projects to qualify as renewable energy that can be purchased to meet the federal renewable purchase requirements. Further, the language adds the term "qualified waste heat resource" to the definition of renewable energy and defines the term to include exhaust heat, gas that would otherwise be flared, incinerated or vented, and "a pressure drop in any gas for industrial or commercial process." The provision also narrows the definition of municipal solid waste eligible to satisfy renewable purchase requirements by excluding segregated recyclable paper.

The Committee Print alters the definition of recyclable paper to be excluded from energy generated using municipal solid waste as a fuel.

R. Section 4121: Inclusion of Smart Grid Capability on Energy Guide labels

Section 4121 contains provisions of section 4 of H.R. 2685, the "Smart Grid Advancement Act of 2013," sponsored by Rep. McNerney in the 113th Congress. This section would facilitate the development of labels to inform consumers of the capabilities and limitations of products for "smart grid" use. The Committee Print makes no changes to this section.

S. Section 4122: Voluntary Verification Programs for Air Conditioning, Furnace, Boiler, Heat Pump, and Water Heater Products

Section 4122 directs DOE to start a negotiated rulemaking process to establish standards for testing and verification of products, and directs the Secretary to recognize voluntary verification programs.

The Committee print makes significant changes to this section to reflect concerns of DOE, however further improvements are needed. The majority and minority staffs have committed to continue negotiations to help strengthen this section before consideration by the full committee.

T. Section 4123: Residential Non-Weatherized Gas Furnaces and Mobile Home Furnaces

The Committee Print makes significant changes to this section. Numerous stakeholders, including: furnace manufacturers, natural gas utilities, home builders, energy efficiency, environmental, and consumer advocates, worked to develop on placeholder language on DOE's efficiency standards for non-weatherized gas furnaces and mobile home furnaces. Section 4123 is currently in brackets to allow for additional minor changes related to concerns raised by DOE. The new compromise language requires DOE to publish a supplemental notice of proposed rulemaking no later than October 31, 2015, which would

provide an opportunity for comment by stakeholders. Then, "[I]nterested persons that are fairly representative of relevant points of view" would be expected to submit joint comments to DOE with recommended standards for non-weatherized gas furnaces and mobile home gas furnaces no later than January 1, 2016. DOE would subsequently publish a final rule on July 31, 2015 which would apply to products manufactured on or after any dates jointly recommended.

U. Section 4124: Future of Industry Program.

The Committee Print adds a new section to establish the Future of Industry Program. Section 4124 would reform and reorient DOE's existing industrial research and assessment centers (IACs), a higher education-based partnership that allows university teams around the country to partner with manufacturers to identify opportunities to improve productivity, reduce waste, and save energy. This section would improve IAC coordination and partnership with the Manufacturing Extension Partnership Centers of the National Institute of Standards and Technology, the DOE Building Technologies Program, and the DOE national laboratories, as well as with energy service providers. This section would also help improve outreach to small- and medium-sized manufacturers and technology providers, and directs the Small Business Administration to expedite consideration of applications from eligible small businesses to implement recommendations of the IACs.

V. Section 4131: Use of Energy and Water Efficiency Measures in Federal Buildings

Section 4131, contains the provisions of H.R. 1629, the "Energy Savings Through Public-Private Partnerships Act," sponsored by Reps. Kinzinger and Welch. This section makes several clarifying improvements to the implementations of Energy Savings Performance Contracts (ESPCs). ESPCs allow the federal government to contract for energy-saving and water-saving improvements in federal buildings that are paid for with the resulting energy and water savings over the life of the contract.

The Committee Print makes no changes to this section.

W. Section 4141: Coordination Of Energy Retrofitting Assistance For Schools

Section 4141 contains the provisions of H.R. 756, the "Streamlining Energy Efficiency for Schools Act" sponsored by Reps. Cartwright and Welch, which passed the House in the 113th Congress.[5] This section directs DOE to establish a clearinghouse to disseminate information regarding available programs and financing mechanisms that may be used to help initiate, develop, and finance energy efficiency, distributed generation, and energy retrofitting projects for schools. The language requires DOE to consult with appropriate agencies to

[5] U.S. House of Representatives, Voice Vote on Agreeing to H.R. 4092 (June 23, 2014); H.R. 4092, the "Streamlining Energy Efficiency for Schools Act of 2014," 113th Cong. (2014).

develop a list of programs and financing mechanisms that are, or may be, used for the projects. It also requires the Office to coordinate with appropriate agencies to develop a collaborative education and outreach effort to streamline communications and promote the programs and financing mechanisms.

The Committee Print makes no changes to this section.

X. Section 4211: FERC Office of Compliance Assistance and Public Participation

The Committee Print makes significant changes to section 4211. This section previously added a new section to the FPA to authorize an "Office of Compliance Assistance." Section 4211 now replaces an existing FPA authorization for an Office of Public Participation that has never been funded, with new language creating an "Office of Compliance Assistance and Public Participation."

The most important concerns raised by Democrats about the initial draft have been addressed in the Committee Print. First, the provision no longer requires the Director to be "selected by, and report solely to, the Commission," which would have given the position a unique and difficult status within the Commission. Second, the Committee Print drops language dictating the office's staffing level and source, which would have taxed the ability of FERC to perform more essential regulatory functions. Finally, the provision drops the requirement for "real-time" compliance guidance, a nearly impossible task given the scope of most regulatory proceedings. The included provision requires the Director to engage in a number of activities to "promote improved compliance" with Commission rules and orders." These activities include making recommendations regarding consumer protection, market integrity and consistent application of rules and orders; providing regulated entities compliance guidance; and informing the Commission and Congress with respect to energy policy matters in FERC's jurisdiction. Issues resolving both the level and source of funding (user fees, general revenues, or a combination) for the Office will need to be resolved before full committee consideration.

Y. Section 4221: GAO Study on Wholesale Electricity Markets

The Committee Print makes significant changes to section 4221. The section previously required FERC, within 30 days of enactment, to direct each regional transmission entity–either a RTO or an ISO–to develop a plan describing how its "current market rules, practices, and structures…meet, or fail to meet" a number of prescriptive criteria. The plan also required the regional transmission entity to identify actions it must take to revise its market rules, practices or structures in order to meet ten specific criteria and to establish a timeframe for implementing those actions. Specifically, the provision required the regional transmission entity's market rules, practices and structures to, among other things, result in just and reasonable rates; "properly value generation facilities" that possess certain "reliability attributes;" "facilitate fuel diversity, resource adequacy, and reliability, including the cost-effective retention and development of needed generation;" promote "equitable integration and treatment of generation resources, business models, and advanced grid technologies;"

“ensure fairness and improved transparency in governance structures;” facilitate natural gas and electric transmission infrastructure; and, consider State and local resource planning.

Section 4221 in the Committee Print now directs GAO to conduct a study of the current market rules, practices and structures of each FERC- approved regional transmission entity to evaluate if and how such market rules, practices and structures meet specific criteria.