

**COMMITTEE ON ENERGY AND COMMERCE
U.S. HOUSE OF REPRESENTATIVES**

**MEMORANDUM
May 16, 2009**

TO: Members of the Committee on Energy and Commerce

FR: Democratic Staff of the Committee on Energy and Commerce

RE: Full Committee Business Meeting on May 18

On Monday, May 18, 2009, at 1:00 p.m. in room 2123 Rayburn House Office Building, the full Committee on Energy and Commerce will meet in open markup session to consider H.R. 2454, the American Clean Energy and Security Act of 2009 (ACES Act), comprehensive energy legislation to deploy clean energy resources, increase energy efficiency, cut global warming pollution, and transition to a clean energy economy.

In the past two and half years, the Committee has held dozens of hearings on energy and climate change policy and has built a detailed factual record on the need for legislation in this area. The nation's dependence on foreign oil has significantly increased over the last decade. Consumers have faced increasing and volatile energy prices. Other countries have overtaken us in the manufacture of wind and solar energy. Energy company investments are paralyzed because of uncertainty about what policies the Congress will establish. Meanwhile, global warming pollution has increased unchecked.

On March 31, 2009, Chairman Waxman and Chairman Markey released a discussion draft of the ACES bill to address these problems. Since that time, nearly 70 witnesses have testified before the Committee about the legislation. The views of members and stakeholders have been considered by the Chairmen and a revised version of the ACES bill was introduced on May 15, 2009.

Following is a description of major provisions of the ACES bill.

TITLE I – CLEAN ENERGY

Subtitle A – Combined Efficiency and Renewable Electricity Standard

Section 101, Combined Efficiency and Renewable Electricity Standard: Amends the Public Utility Regulatory Policies Act to require retail electric suppliers — defined as utilities that sell more than 4 million megawatt hours (MWh) of electricity to consumers for purposes other than resale — to meet a certain percentage of their load with electricity generated from renewable resources and electricity savings. The combined renewable electricity and electricity savings

requirement begins at 6% in 2012 and gradually rises to 20% in 2020. Up to one quarter of the 20% requirement automatically may be met with electricity savings. Upon petition of the governor of any state, the Federal Energy Regulatory Commission is authorized to increase the proportion of compliance that can be met with efficiency savings to up to two fifths for electric suppliers located within that state. This would reduce the renewable requirement for such States to a minimum of 12% renewables and up to 8% efficiency by 2020.

Defines renewable energy resources to include wind, biomass, solar, geothermal, certain hydropower projects, marine and hydrokinetic renewable energy, and biogas and biofuels derived exclusively from eligible biomass. Other qualifying energy resources include landfill gas, wastewater treatment gas, coal mine methane, and qualified waste-to-energy. An electric supplier's requirement is reduced in proportion to any portion of its electricity sales that is generated from certain existing hydroelectric facilities, new nuclear generating units, and fossil-fueled units that capture and geologically sequester greenhouse gas emissions.

Requires retail electric suppliers to submit Federal renewable electricity credits and electricity savings each year equal to the combined target for that year times the supplier's retail sales. One renewable electricity credit is given for each MWh of electricity produced from a renewable resource. To encourage greater deployment of distributed generation, like small wind and rooftop solar, these projects are eligible for three credits for each MWh produced. Retail electric suppliers may submit, in lieu of a renewable electricity credits and demonstrated electricity savings, an alternative compliance payment equal to \$25 per credit (2.5 cents per kilowatt hour).

Electric suppliers choosing to use efficiency for a portion of their compliance are required to demonstrate achievement of electricity savings relative to business-as-usual projections through efficiency measures, including savings achieved through reductions in end-use electricity consumption attributable to equipment or facility upgrades, combined heat and power, and energy recycling (waste heat recovery). Electric suppliers may meet the efficiency standards either by achieving electricity savings directly or by using bilateral contracts to purchase savings achieved by other suppliers or distribution companies, states, or third-party efficiency providers.

Subtitle B – Carbon Capture and Sequestration

Section 111, National Strategy: Requires the EPA Administrator, in consultation with the heads of other relevant federal agencies, to submit to Congress a report setting forth a unified and comprehensive strategy to address the key legal and regulatory barriers to the commercial-scale deployment of carbon capture and sequestration.

Section 112, Regulations for Geologic Sequestration Sites: Amends the Clean Air Act to require the Administrator to establish a coordinated approach to the certification and permitting of sites where geologic sequestration of carbon dioxide will occur. Amends the Safe Drinking Water Act to establish a site certification program to ensure the environmental integrity of geologic sequestration sites.

Section 113, Studies and Reports: Requires the Administrator to establish a task force to conduct a study of existing federal and state environmental statutes that apply to geologic sequestration, including the ability of such laws to serve as risk management tools, as well as other areas relevant to geologic sequestration and long-term stewardship of such sites. The section also requires a report to Congress on findings and consensus recommendations.

Section 114, Carbon Capture and Sequestration Demonstration and Early Deployment Program: Establishes a program for the demonstration and early deployment of carbon capture and sequestration technologies. Authorizes fossil-based electricity distribution utilities to hold a referendum on the establishment of a Carbon Storage Research Corporation. If approved by entities representing two-thirds of the nation's fossil fuel-based delivered electricity, the Corporation would be established and would be authorized to collect assessments from retail customers of fossil-based electricity. The Corporation would be operated as a division of the Electric Power Research Institute and would assess fees totaling approximately \$1 billion annually, to be used by the Corporation to fund the large-scale demonstration of CCS technologies in order to accelerate the commercial availability of the technologies.

Section 115, Commercial Deployment of Carbon Capture and Sequestration Technologies: Amends Title VII of the Clean Air Act to direct the EPA Administrator to establish an incentive program to distribute allowances to support the commercial deployment of carbon capture and sequestration technologies in both electric power generation and industrial applications. Establishes eligibility requirements for facilities to receive allowances based on the number of tons of carbon dioxide sequestered. The allowance disbursement program is structured to provide greater incentives for facilities to deploy CCS technologies early in the program and for facilities to capture and sequester larger amounts of carbon dioxide.

Section 116, Performance Standards for Coal-Fueled Power Plants: Amends Title VIII of the Clean Air Act to establish performance standards for new coal-fired power plants permitted in 2020 or thereafter. Describes eligibility criteria, applicable emission standards, and the schedule upon which such standards must be met. Plants permitted from 2009-2020 would be required to meet the initial standard after certain technology deployment criteria were met but no later than 2025.

Subtitle C – Clean Transportation

Section 121, Electric Vehicle Infrastructure: Amends the Public Utility Regulatory Policies Act to require utilities to consider developing plans to support electric vehicle infrastructure and to consider establishing protocols for integration with smart grid systems.

Section 122, Large-Scale Vehicle Electrification Program: Authorizes the Secretary of Energy to provide financial assistance for regional deployment and integration of grid-connected vehicles. Funds may be used for offsetting the incremental cost of purchasing new plug-in electric drive vehicles, deployment of electric charging stations or battery exchange locations, or facilitating the integration of smart grid equipment with plug-in electric drive vehicles. Makes data and results from the regional deployments publicly available.

Section 123, Plug-In Electric Drive Vehicle Manufacturing: Authorizes the Secretary of Energy to provide financial assistance for retooling existing factories for the manufacture of electric vehicles. Authorizes the Secretary of Energy to provide financial assistance to help auto manufacturers purchase batteries for first production vehicles.

Section 124, Investment in Clean Vehicles: Provides for distribution of allowances for plug-in electric drive vehicle manufacturing and deployment and advanced technology vehicles.

Subtitle D – State Energy and Environment Development Accounts

Section 131, Establishment of SEED Accounts: Creates a program for each state to establish a State Energy and Environment Development (SEED) Account, to serve as a state-level repository for managing and accounting for all emission allowances designated primarily for renewable energy and energy efficiency purposes.

Section 132, Support of State Renewable Energy and Energy Efficiency Programs: Distributes emission allowances among states for energy efficiency programs and renewable energy deployment and manufacturing support. At least 12.5% of the allowances are distributed to local governments for these purposes.

Subtitle E – Smart Grid Advancement

Section 141, Definitions: Provides relevant definitions.

Section 142, Assessment of Smart Grid Cost Effectiveness in Products: Instructs the Department of Energy and the Environmental Protection Agency to assess products evaluated for Energy Star ratings for benefits of Smart Grid capability.

Section 143, Inclusions of Smart Grid Capability on Appliance ENERGY GUIDE Labels: Instructs Federal Trade Commission to include relevant information on the ENERGYGUIDE labels for those products that include cost-effective Smart Grid capability.

Section 144, Smart Grid Peak Demand Reduction Goals: Requires the Federal Energy Regulatory Commission to coordinate and support a national program to reduce peak electric demand for load-serving electric utilities with peak loads in excess of 250 megawatts.

Section 145, Reauthorization of Energy Efficiency Public Information Program to Include Smart Grid Information: Amends the Energy Policy Act of 2005 to reauthorize the joint Department of Energy and Environmental Protection Agency energy efficiency public information initiative and expands the initiative to include information on smart grid technologies, practices, and benefits.

Section 146, Inclusion of Smart Grid Features in Appliance Rebate Program: Amends the Energy Policy Act of 2005 to expand energy efficient appliance rebate program to include

rebates for efficient appliances with smart grid features and capability. Clarifies program cost-sharing requirements from states.

Subtitle F – Transmission Planning

Section 151, Transmission Planning: Amends the Federal Power Act to establish a federal policy on electric grid planning that recognizes the need for new transmission capacity to deploy renewable energy as well as the potential for more efficient operation of the current grid through new technology, demand-side management, and storage capacity. Enhances existing regional transmission planning processes by incorporating this federal policy. Charges the Federal Energy Regulatory Commission with supporting, coordinating, and integrating regional planning efforts.

Subtitle G – Technical Corrections to Energy Laws

Sections 161-162, Technical Corrections to Energy Independence and Security Act of 2007 and Energy Policy Act of 2005: Makes technical corrections to the Energy Independence and Security Act of 2007 and the Energy Policy Act of 2005.

Subtitle H – Clean Energy Innovation Centers

Section 171, Clean Energy Innovation Centers: Establishes a program to support development and commercialization of clean energy technologies through eight regional Clean Energy Innovation Centers selected competitively by the Secretary of Energy. Centers may be awarded to consortiums consisting of research universities, private research entities, industry, and relevant state institutions. Each Center has a unique technology focus to which at least 40% of support would be directed.

Subtitle I – Marine Spatial Planning

Section 181, Study of Ocean Renewable Energy and Transmission Planning and Siting: Requires the Federal Energy Regulatory Commission, the Department of Interior, and the National Oceanic and Atmospheric Administration to jointly recommend an approach for the development of regional marine spatial plans for the siting of offshore renewable energy facilities. The Council on Environmental Quality determines whether the recommended approach should be implemented and coordinates the implementation.

TITLE II – ENERGY EFFICIENCY

Subtitle A – Building Energy Efficiency Programs

Section 201, Greater Energy Efficiency in Building Codes: Amends the Energy Conservation and Production Act to require the Secretary of Energy to support consensus code-setting organizations to establish building codes achieving 30% and 50% higher energy efficiency targets in 2010 and 2016, respectively, to establish codes directly if such organizations fail to do

so, to include cool roofs standards, and to support state and local adoption of such advanced codes by supporting training and funding for energy efficiency code enforcement.

Section 202, Building Retrofit Program: Establishes a program under which the Administrator of EPA, in consultation with the Secretary of Energy, supports development of standards and processes for retrofitting existing residential and nonresidential buildings. Authorizes the Secretary of Energy to provide funding to states to conduct cost-effective building retrofits, using local governments, other agencies or entities to carry out the work, through flexible forms of financial assistance up to 50% of the costs of retrofits, with funding increasing in proportion to efficiency achievement. Also supports retrofits of historic buildings.

Section 203, Energy Efficient Manufactured Homes: Establishes a program to provide federal rebates of up to \$7,500 toward purchases of new Energy Star-rated manufactured homes for low-income families residing in pre-1976 manufactured homes.

Section 204, Building Energy Performance Labeling Program: Establishes an EPA program to develop procedures to label buildings for their energy performance characteristics, using building type and consumption data to be developed by the Energy Information Administration. The program would be implemented by states in a manner suited to increasing public knowledge of building energy performance without hindering real estate transactions.

Subtitle B – Lighting and Appliance Energy Efficiency Programs

Section 211, Lighting Efficiency Standards: Amends the Energy Policy and Conservation Act to adopt negotiated agreements on technical standards for lighting, including outdoor lighting – street lights, parking lot lights, and parking structure lights – and portable light fixtures such as typical household and commercial plug-in lamps.

Section 212, Other Appliance Efficiency Standards: Amends the Energy Policy and Conservation Act to adopt consensus agreements on technical standards for hot food holding cabinets, bottle-type drinking water dispensers, portable spas (hot tubs), and commercial-grade natural gas furnaces.

Section 213, Appliance Efficiency Determinations and Procedures: Amends the Energy Policy and Conservation Act to improve the Department of Energy process for setting energy-efficiency standards by enabling adoption of consensus testing procedures; requiring the adoption of a new television standard; improving standard-setting cost-effectiveness formula; authorizing the Secretary to obtain product-specific information as needed; authorizing state injunctive enforcement of standards violations; changing the role of appliance efficiency in building codes; and including greenhouse gas emissions, smart grid capability, and availability of more-efficient models among factors affecting efficiency standard ratings.

Section 214, Best-in-Class Appliances Deployment Program: Creates a Department of Energy program to provide rewards to retailers for successful marketing of high-efficiency appliances, designating top performers as “best-in-class,” and providing bonuses based on efficiency

improvement compared to average product. Provides additional rewards to retailers when best-in-class sale includes return and recycling of inefficient appliances. Creates program to reward manufacturers of new high-efficiency best-in-class models representing significant incremental energy efficiency gain.

Section 215, Purpose of Energy Star: Provides “Purpose” section for Energy Star provisions clarifying that Energy Star products must be cost-effective, recovering incremental purchase price in expected energy savings during a 3-5 year period.

Subtitle C – Transportation Efficiency

Section 221, Emissions Standards: Directs the President to work with the Department of Transportation, EPA, and California to harmonize, to the maximum extent possible, the federal fuel economy standards, any emission standards promulgated by EPA, and the California standards for light-duty vehicles. Requires and sets deadlines for EPA to establish greenhouse gas emissions standards for new heavy-duty vehicles and engines and for nonroad vehicles and engines, including new marine vessels and locomotives, aircraft, and aircraft engines. Such standards will be established using existing authorities.

Section 222, Greenhouse Gas Emissions Reductions through Transportation Efficiency: Amends Title VIII of the Clean Air Act to require states to establish goals for greenhouse gas reductions from the transportation sector and requires the submission of transportation plans to meet those goals by Metropolitan Planning Organizations for areas with populations exceeding 200,000 people. Imposes sanctions on states that fail to submit goals or plans. Authorizes a competitive grant program for development and implementation of plans.

Section 223, SmartWay Transportation Efficiency Program: Amends Title VIII of the Clean Air Act to expand an existing EPA loan and fuel saving technology deployment program, the SmartWay Transport Partnership, to help American truckers upgrade to more fuel efficient and less polluting vehicles.

Section 224, State Vehicle Fleets: Requires the Secretary of Energy to update state fleet rules to be consistent with current law.

Subtitle D – Industrial Energy Efficiency Programs

Section 241, Industrial Plant Energy Efficiency Standards: Requires the Secretary of Energy to establish standards for industrial energy efficiency and to seek recognition of result by American National Standards Institute.

Section 242, Electric and Thermal Energy Efficiency Award Programs: Creates an award program for innovation in increasing the efficiency of thermal electric generation processes, including encouragement for utilities to capture and separately market excess thermal energy.

Section 243, Clarifying Election of Waste Heat Recovery Financial Incentives: Clarifies Section 451 of the Energy Independence and Security Act of 2007 to ensure that those who recover waste energy can elect to receive the incentive grants provided in that section, or tax credits provided for combined heat and power, but not both.

Subtitle E – Improvements in Energy Savings Performance Contracting

Section 251, Energy Savings Performance Contracts: Amends the National Energy Conservation Policy Act to establish competition requirements for specific energy savings performance contract task orders.

Subtitle G – Public Institutions

Section 261, Public Institutions: Amends the Energy Independence and Security Act to include non-profit hospitals and public health facilities among public institutions eligible for grants and loans and clarifies loan and cost-share conditions.

Section 262, Community Energy Efficiency Flexibility: Amends the Energy Independence and Security Act to remove limits on funds received by communities through the Energy Efficiency and Conservation Block Grant program that can be used to fund revolving loan accounts or through sub-grants for purposes of the program.

Section 263, Small Community Joint Participation: Amends the Energy Independence and Security Act to allow small communities to join with other neighboring small communities in a joint program of sufficient size to be defined as an eligible local government recipient under the Energy Efficiency and Conservation Block Grant program.

Section 264, Low-Income Community Energy Efficiency Program: Authorizes grants to community development organizations to provide financing to improve energy efficiency, develop alternative, renewable, and distributed energy supplies, promote opportunities for low-income residents, and increase energy conservation in low income rural and urban communities.

Title III – REDUCING GLOBAL WARMING

Section 301, Short Title: Safe Climate Act.

Subtitle A – Reducing Global Warming Pollution

Section 311, Section 312, and Section 321, Reducing Global Warming Pollution: Establishes Title VII of the Clean Air Act to provide a declining limit on global warming pollution and to hold industries accountable for pollution reduction under the limit. Adds definitions to section 700 of the Clean Air Act.

Title VII – GLOBAL WARMING POLLUTION REDUCTION PROGRAM

Part A – Global Warming Pollution Reduction Goals and Targets

Section 701, Findings and Purposes

Section 702, Economy-wide Reduction Goals: States that the purpose of Title VII and Title VIII is to reduce economy-wide global warming pollution to 97% of 2005 levels by 2012, 80% by 2020, 58% by 2030, and 17% by 2050.

Section 703, Reduction Targets for Specified Sources: Directs the EPA Administrator to issue regulations to reduce emissions of covered sources to 97% of 2005 levels by 2012, 83% by 2020, 58% by 2030, and 17% by 2050.

Section 704, Supplemental Pollution Reductions: Directs the Administrator to achieve additional low-cost reductions in global warming pollution by using a small portion of the emissions allowances to provide incentives to reduce emissions from international deforestation.

Section 705, Review and Program Recommendations: Directs the Administrator to submit a report to Congress every four years. These reports will include: an analysis of the latest science relevant to climate change, an analysis of capacity to monitor and verify greenhouse gas reductions, and an analysis of worldwide and domestic progress in reducing global warming pollution. The reports will identify steps that could be taken to better improve our understanding of climate impacts, improve monitoring and verification, and any additional reductions in emissions that may be needed to avoid dangerous climate change.

Section 706, National Academy Review: Directs the Administrator to commission reports from the National Academy of Sciences every four years. These reports will include: an update on the progress of various clean technologies, and an evaluation of the most recent EPA report submitted under Section 705 . The reports will identify steps that could be taken to better improve our understanding of climate impacts, improve monitoring and verification, speed the deployment of clean technology, and any additional reductions in emissions that may be needed to avoid dangerous climate change.

Section 707, Presidential Response and Recommendations: Directs the President to use existing authority to respond to recommendations in the reports. If the National Academy review confirms that further emissions reductions are needed, either domestically or globally, the President must submit a report to Congress recommending steps (including legislation) to achieve those reductions.

Part B – Designation and Registration of Greenhouse Gases

Section 711, Designation of Greenhouse Gases: Establishes a list of greenhouse gases regulated under this title: carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons (HFCs) emitted as a byproduct, perfluorocarbons, and nitrogen trifluoride. The Administrator may designate additional anthropogenic greenhouse gases by rule.

Section 712, Carbon Dioxide Equivalent Value of Greenhouse Gases: Lists carbon dioxide equivalents for each gas. Requires periodic review of equivalence values by the Administrator.

Section 713, Greenhouse Gas Registry: Directs EPA to establish a federal greenhouse gas registry and comprehensive reporting system for greenhouse gas emissions.

Part C - Program Rules

Section 721, Emission Allowances: Establishes an annual tonnage limit on greenhouse gas emissions from specified activities. Directs the Administrator to establish allowances equal to the tonnage limit for each year (with one allowance representing the permission to emit one ton of greenhouse gases, measured in tons of carbon dioxide equivalent).

Section 722, Prohibition of Excess Emissions: Prohibits covered entities from emitting or having attributable greenhouse gases in excess of their allowable emissions level, which is determined by the number of emission allowances and offset credits they hold. Electricity generators, liquid fuel refiners and importer, and fluorinated gas manufacturers are covered starting with emissions in 2012. Industrial sources that emit more than 25,000 tons of carbon dioxide equivalent per year are covered starting with emissions in 2014. Local distribution companies that deliver natural gas are covered starting with emissions in 2016.

In addition to emission allowances, covered entities are able to offset up to 2 billion tons of emissions by using EPA-approved domestic and international offset credits, split evenly between international and domestic offsets. The ability to use these offsets is divided pro rata among all covered entities. If the Administrator determines an insufficient number of domestic offsets are available, the number of international offsets available may be increased up to 1.5 billion metric tons. Beginning in 2017, covered entities using offsets must submit five tons of international offset credits for every four tons of emissions being offset. Covered entities may also submit an international emission allowance or compensatory allowance in place of a domestic emission allowance.

Section 723, Penalty for Noncompliance: Establishes penalties for parties that fail to comply with the program guidelines.

Section 724, Trading: Clarifies that the legislation does not restrict who can hold an allowance, nor does it restrict the purchase, sale, or other transaction involving allowances.

Section 725, Banking and Borrowing: Permits unlimited banking of allowances for use during future compliance years. Establishes a two-year rolling compliance period by allowing covered entities to borrow an unlimited number of allowances from one year into the future. Covered entities may also satisfy up to 15% of their compliance obligations by submitting emission allowances with vintage years 2 to 5 years in the future, but must pay an 8% premium (in allowances) to do so.

Section 726, Strategic Reserve: Directs the Administrator to create a “strategic reserve” of 2.5 billion metric tons of emission allowances by setting aside a small number of allowances from each year’s tonnage limit. Establishes rules for releasing allowances from the reserve and for refilling the reserve if allowances from the reserve are sold.

Section 727, Permits: Clarifies the obligations of stationary sources under the Clean Air Act’s Title V operating permit program under the newly-established Title VII program.

Section 728, International Emission Allowances: Establishes criteria that must be met before allowances from foreign programs can be used for compliance by covered entities.

Part D – Offsets

Section 731, Offsets Integrity Advisory Board: Establishes an independent Offsets Integrity Advisory Board composed of scientists and others with relevant expertise. The Advisory Board is charged with providing recommendations to the Administrator on: the types of offset project types that should be listed by EPA as eligible; potential levels of scientific uncertainty associated with certain offset types; appropriate quantification or other methodologies; and other areas of the offsets and deforestation provisions in the draft. The Board is also charged with conducting a regular review of all relevant areas.

Section 732, Establishment of Offsets Program: Directs the EPA Administrator to establish an offsets program and requires that regulations ensure offsets are verifiable, additional, and permanent.

Section 733, Eligible Project Types: Requires the Administrator to establish a list of offset project types that are eligible under the program, taking into account the recommendations of the Offsets Integrity Advisory Board. Provides guidelines for establishing and updating the list.

Section 734, Requirements for Offset Projects: Requires that for each offset project type, the Administrator establish standardized methodologies for determining additionality; establishing baselines; measuring performance; accounting for leakage; discounting for uncertainty; and addressing reversals.

Sections 735 - 737, Approval and Verification of Offset Projects; Issuance of Offset Credits: Establishes procedures to approve and verify offset projects. Requires the use of accredited third-party verifiers. Directs the Administrator to issue offset credits only if the emissions reduction or sequestration has already occurred and other specified conditions are met.

Section 738, Audits: Requires the Administrator to conduct, on an on-going basis, random audits of offset projects, offset credits, and practices of third-party verifiers.

Section 739, Program Review and Revision: Requires the periodic evaluation and updating of the offsets program, including revisions to project methodologies.

Section 740, Early Offset Supply: To ensure a supply of offset credits in the early years of the program, allows for the issuance of offset credits for offsets from programs that meet specified criteria. Such credits may only be issued for a limited timeframe and only for reductions achieved for a specified time period.

Section 741, Environmental Considerations: Provides requirements for additional environmental considerations for forestry projects.

Section 742, Trading: Provides that the trading provisions applicable to allowances are also applicable to offset credits.

Section 743, International Offset Credits: Allows the Administrator to issue international offset credits for activities that take place outside the United States. Requires that all international offset credits must meet the criteria established in preceding sections, unless for specified types of international offset credits compliance is infeasible and other safeguards for environmental integrity are established. In addition, requires that the United States be a party to a bilateral or multilateral agreement or arrangement with the country where an offset activity would take place before any international offset credits can be issued.

Requires the Administrator, in consultation with the Secretary of State, to identify sectors in specific countries in which the issuance of international offset credits on a sector-wide basis is appropriate. Establishes the terms under which the Administrator may issue international offset credits for other international instruments, specifically requiring a determination that the issuing international body has implemented substantive and procedural requirements for the relevant project type that provide equal or greater assurance of environmental integrity.

Establishes procedures and requirements regarding the issuance of international offset credits for activities that reduce deforestation. For major emitting nations, international offset credits can only be issued for national-scale activities, or for state or province-level activities in states or provinces that would themselves be considered major emitters. Smaller-scale offset projects are only allowed in countries that generate less than 1% of global greenhouse gas emissions as well as less than 3% of global forest sector and land

use change emissions. All countries must transition to national baselines to continue generating credits.

Part E – Supplemental Emissions Reductions from Reduced Deforestation

Section 751-752, Definitions and Findings: Defines forest carbon activities and finds that land use change, primarily deforestation, accounts for roughly 20% of global greenhouse gas emissions.

Section 753, Supplemental Emissions Reductions through Reduced Deforestation: Directs the Administrator of EPA, in consultation with the Administrator of USAID, to establish a program to build capacity in developing countries to reduce emissions from deforestation (including preparation to participate in international markets for deforestation reduction credits), to achieve emissions reductions in addition to those achieved under the domestic emissions limit, and to protect intact forest from any shifts in land use as a result of reduced deforestation in other areas.

Section 754, Requirements for International Deforestation Reduction Program: Directs the Administrators of EPA and USAID to support a broad range of activities to reduce deforestation, create markets for deforestation reduction credits, and reduce the leakage of emissions. Activities supported through this program must be environmentally sound and should protect the rights of indigenous groups and local communities. Support for emissions reductions must ensure that countries are transitioning to nationwide accounting of reduced deforestation.

Section 755, Reports and Reviews: Directs the Administrators of EPA and USAID to report annually to Congress on progress in reducing deforestation through this program and perform a review of the program every four years.

Section 756, Legal Effect of Part: Clarifies that this program does not supersede or limit any other federal or international law.

Subtitle B – Disposition of Allowances

Section 321, Disposition of Allowances for Global Warming Pollution Reduction Program: Provides for emission allowances to be distributed for three primary goals: to protect consumers from energy price increases, to assist industry in the transition to a clean energy, and to spur energy efficiency and the deployment of clean energy technology. Allocates a small amount of allowances to prevent deforestation and support national and international adaptation efforts and for other purposes.

Part H – Disposition of Allowances

Section 781, Allocation of Allowances for Supplemental Reductions: Directs the Administrator to allocate allowances for the program under part E to achieve

supplemental emissions reductions from reduced deforestation. Allocates 5% of allowances for the years 2012-2025, 3% for 2026-2030, and 2% for 2031-2050.

Section 782, Allocation of Emission Allowances: Provides for allocation of allowances to electricity consumers; natural gas consumers; home heating oil and propane consumers; low-income consumers, trade-vulnerable industries; investment in clean energy from coal; investment in energy efficiency and renewable energy; centers of excellence; clean vehicle technology; domestic fuel production; workers; domestic, wildlife, and natural resources adaptation; international adaptation; clean technology transfer; deficit reduction; and consumer rebates.

Section 783, Electricity Consumers: Provides approximately 30% of allowances to local electric distribution companies, whose rates are regulated by states, to protect consumers from electricity price increases. Provides approximately 5% of allowances for merchant coal generators and certain generators with long-term power purchase agreements. Provides for phase-out of allowances over a five-year period from 2026 through 2030.

Section 784, Natural Gas Consumers: Provides 9% of allowances to local natural gas distribution companies, whose rates are regulated by states, to protect consumers from electricity price increases. Provides for phase-out of allowances over a five-year period from 2026 through 2030.

Section 785, Home Heating Oil and Propane Consumers: Provides 1.5% of allowances to states for programs to benefit users of home heating oil and propane. Provides for phase-out of allowances over a five-year period from 2026 through 2030.

Section 786-788 [Reserved]

Section 789, Climate Change Rebates: Any unallocated allowances beginning in 2026 will be auctioned and the proceeds returned to consumers on a per capita basis as a climate change rebate.

Section 790, Exchange for State-Issued Allowances: Provides for fair compensation and exchange of allowances issued by the State of California, the Regional Greenhouse Gas Initiative and the Western Climate Initiative prior to commencement of federal program.

Section 791, Auction Procedures: Establishes single-round, sealed-bid, uniform-price auction procedures, which may be modified by the Administrator.

Section 792, Auctioning Allowances for Other Entities: Establishes rules by which the Administrator may auction allowances on behalf of other entities.

Section 793, Establishment of Funds: Establishes the Strategic Reserve Fund and the Climate Change Dividend Fund in the U.S. Treasury.

Section 331, Greenhouse Gas Standards: Establishes Title VIII of the Clean Air Act to achieve additional greenhouse gas reductions outside of Title VII.

Title VIII – ADDITIONAL GREENHOUSE GAS STANDARDS

Section 801, Definitions

Part A – Stationary Source Standards

Section 811, Standards of Performance: Requires the Administrator to use existing Clean Air Act authority (section 111) to set greenhouse gas emission performance standards for certain sources with greenhouse gas emissions that are not subject to the annual tonnage limit in Title VII. Precludes the Administrator from using existing Clean Air Act section 111 authority to issue standards for entities covered by Title VII that directly emit greenhouse gases.

Part C – Exemptions from Other Programs

Section 831, Criteria Pollutants: Provides that greenhouse gases may not be listed as criteria air pollutants on the basis of their effect on climate change.

Section 832, Hazardous Air Pollutants: Provides that greenhouse gases may not be listed as hazardous air pollutants on the basis of their effect on climate change.

Section 833, New Source Review: Provides that New Source Review shall not apply to greenhouse gas emissions.

Section 834, Title V Permits: Provides that greenhouse gases shall not be considered when determining whether a stationary source is required to operate pursuant to a permit under Title V.

Section 835, Existing Proceedings: Provides that this Act does not affect the requirements to be applied in existing administrative proceedings or litigation initiated under the Clean Air Act prior to the date of enactment, such that this legislation does not interfere with or determine the outcome of ongoing permit appeals. Further provides that new electric utility units subject to performance standards adopted under this Act are not subject to any new source review requirements with respect to greenhouse gas emissions.

Section 332, HFC Regulation: Regulates the production and consumption of HFCs, many of which are extremely potent greenhouse gases, under a separate limit and reduction schedule. Allowances are distributed through a combination of annual auctions and non-auction sales based on the auction price. HFC consumption will be phased-down to 15% of the baseline by 2032. Offset credits can be obtained through the destruction of chlorofluorocarbons (CFCs), which contribute to global warming and deplete the stratospheric ozone layer.

Section 333, Black Carbon: Directs the Administrator to report on existing efforts to reduce domestic black carbon pollution and, if necessary, to use existing authority to achieve further reductions. Directs the Administrator, in coordination with the Secretary of State, to report to Congress on current and potential future assistance to foreign nations to help reduce black carbon pollution.

Section 334, States: Preserves states' existing authority to adopt and enforce standards or limitations on air pollution under the Clean Air Act, including greenhouse gas emissions.

Section 335, State Programs: Bars states from implementing or enforcing a cap on greenhouse gas emissions between the years 2012 to 2017, but allows regulation of emissions by other means during this period.

Section 336, Enforcement: Provides that for petitions for review under the Clean Air Act, the court may remand an action of the Administrator without vacatur under specified circumstances. Requires the Administrator to take final action on a petition for reconsideration under the Clean Air Act within 150 days of receipt.

Section 337, Conforming Amendments: Provides for conforming amendments to Clean Air Act enforcement and administrative provisions to incorporate titles VII and VIII.

Subtitle D – Carbon Market Assurance

Section 341, Oversight and Assurance of Carbon Market: Amends the Federal Power Act to provide for strict oversight and regulation of the new markets for carbon allowances and offsets. Ensures market transparency and liquidity and allows trading in carbon allowance futures so that regulated entities can protect themselves against future cost increases and obtain the allowances they need for compliance at a fair price. The Federal Energy Regulatory Commission is charged with regulating the allowance and offset markets. The President is empowered to delegate regulatory responsibility for the derivatives markets to an appropriate agency, based on the advice of an interagency working group. Protects market participants from speculation and manipulation of carbon prices, including default position limits of 10% on carbon allowances and offset derivatives and a default ban on over-the-counter trading of derivatives.

Subtitle E – Additional Market Assurance

Sections 351 through 358: Amends the Commodity Exchange Act to provide greater oversight of energy commodity derivatives and credit default swaps. Establishes default Commodity Futures Trading Commission regulatory authority over and regulations of allowance derivative markets.

TITLE IV – TRANSITIONING TO A CLEAN ENERGY ECONOMY

Subtitle A –Industrial Sector

Section 401, Ensuring Real Reductions in Industrial Emissions: Creates a program within Title VII of the Clean Air Act to ensure reductions in industrial greenhouse gas emissions through emission allowance rebates and international reserve allowances.

Part F – Ensuring Real Reductions in Industrial Emissions

Section 761, Purposes: Outlines the purposes of Subtitle A and the additional purposes of Part 1 of Subtitle A. The purposes of Subtitle A include: promoting a strong global effort to significantly reduce greenhouse gas emissions and preventing an increase in greenhouse gas emissions in foreign countries as a result of compliance costs incurred under title VII of the Clean Air Act, as added by ACES of 2009. The additional purposes of Part 1 include: compensating eligible domestic industrial sectors and subsectors for costs incurred under Title VII; limiting such compensation to amounts that meet the goals of the program; and rewarding innovation and facility-level investments in efficiency upgrades and performance improvements.

Section 762, International Negotiations: Finds that the purposes of this subtitle can be most effectively achieved through international agreements and states that it is the policy of the United States to work proactively under the UNFCCC and in other forums to establish binding agreements committing all major-emitting countries to contribute equitably to the reduction of global greenhouse gas emissions.

Section 763, Definitions: Provides relevant definitions.

Subpart 1 – Emission Allowance Rebate Program

Section 764, 765, Eligible Industrial Sectors, Distribution of Emission Allowance Rebates: Establishes a program that rebates to eligible industrial sectors and subsectors a sum intended to compensate entities in those sectors for the costs they incur as a result of complying with the pollution limit established by Title VII.

Instructs the EPA Administrator to annually distribute rebates to the owners and operators of entities in eligible industrial sectors. The Administrator is required to determine which facilities should be eligible for rebates through a rule based on an assessment of economic factors, including (1) the energy or greenhouse gas intensity in a sector and (2) the trade intensity in such sectors. Sectors meeting the listed criteria for both factors would be deemed eligible to receive rebates.

Rebates are distributed to eligible facilities on a product output basis, with compensation provided for both direct and indirect compliance costs. For direct compliance costs, allowance distribution is calculated by multiplying a facility's product output by the sector average tonnage of greenhouse gas emissions per unit of product output. For indirect costs passed on by electric utilities, allowance distribution is calculated by multiplying a covered or uncovered facility's product output (1) by the "emissions

intensity” of each facility’s electric power supplier and (2) by the sector average electricity use per unit of product output.

Subpart 2 – International Reserve Allowance Program

Section 766, International Reserve Allowance Program: Establishes an international reserve allowance program, which may be implemented by the President beginning in 2025 pursuant to a determination under Part 3.

Subpart 3 – Presidential Determination

Section 767, Presidential Reports and Determinations: Requires the President to submit a report to Congress no later than January 1, 2018, regarding the effectiveness of the distribution of emission allowance rebates under Part 1 in mitigating the risk of increased greenhouse gas emissions in foreign countries resulting from compliance costs incurred under title VII.

Requires the President to make a determination, no later than June 30, 2022, and every four years thereafter, for each sector eligible for rebates under Part 1, of whether more than 70% of global output of that sector is produced in countries that meet at least one of the following criteria: (1) party to an international treaty to which the U.S. is a party that includes a nationally enforceable emissions reduction commitment that is at least as stringent as that of the U.S.; (2) party to an international sectoral agreement for that sector to which the U.S. is a party; (3) energy or greenhouse gas intensity for that sector that is equal or less than that of the U.S.; or (4) implemented emissions reduction policies that together impose a cost on that sector that is at least 60% of the cost of complying with Title VII for that sector in the United States.

If the President determines that less than 70% of global output of a sector is produced in countries that meet one or more of the above criteria, then the President shall continue emission allowance rebate program under Part 1 or implement the International Reserve Allowance Program under Part 2 or a combination of the two for that sector. In the absence of such a determination, the emission allowance rebates for entities in the sector will decline by 10% per year.

Part G – Petroleum Refineries

Section 771, Domestic Fuel Production: Provides 2% of allowances to domestic oil refiners starting in 2014 and ending in 2026.

Subtitle B – Green Jobs and Worker Transition

Part 1 – Green Jobs

Section 421, Clean Energy Curriculum Development Grants: Amends the Carl. D. Perkins Career and Technical Education Act of 2006 to authorize the Secretary of Education to award grants to universities and colleges to develop programs of study that prepare students for careers in renewable energy, energy efficiency, and other forms of global warming mitigation. These grants are peer reviewed by experts with relevant experience in the areas being considered for funding.

Section 422, Increased Funding for Energy Worker Training Program: Increases the authorization for the Green Jobs Act, authorized in the Energy Independence and Security Act, from \$125 million to \$150 million.

Part 2 – Climate Change Worker Adjustment Assistance

Section 425-427, Petitions, Eligibility Requirements, and Determinations; Program Benefits; General Provisions: Establishes a program to entitle any worker displaced as a result of the Title VII of the Clean Air Act to be entitled to 156 weeks of income supplement, 80 percent of their monthly health care premium, up to \$1,500 for job search assistance, up to \$1,500 for moving assistance, and additional employment services for skills assessment, job counseling, training, and other services.

Subtitle C – Consumer Assistance

Section 431, Energy Tax Credit: In the event of any reduced purchasing power as a result of Title VII of the Clean Air Act, provides tax credits to the lowest-income households to compensate for such losses.

Section 432, Energy Refund Program for Low-Income Consumers: Directs the EPA Administrator to administer an “Energy Refund Program” to provide monthly cash energy refunds to low income individuals to compensate for any reduced purchasing power resulting from Title VII of this Act. Provides that energy refunds shall not be considered taxable income.

Subtitle D – Exporting Clean Technology

Sections 441-443, Findings and Purposes, Definitions, Governance: States that the purpose of this subtitle is to provide U.S. resources to encourage widespread deployment of clean technologies to developing countries. Establishes a Clean Technology Account administered by the State Department in consultation with an interagency group. The Account will supplement and not supplant other federal funding.

Section 444, Determination of Eligible Countries: Generally, only developing countries that have ratified an international treaty or agreement or have undertaken nationally appropriate mitigation activities achieving substantial greenhouse gas reductions are eligible for bilateral assistance. Least developed countries may use assistance to build capacity toward meeting eligibility criteria.

Sections 445, Qualifying Activities: Eligible projects must achieve substantial greenhouse gas reductions that are substantial, measurable, reportable, and verifiable. Eligible activities include deployment of carbon capture and storage, renewable electricity, efficiency projects, deployment of low-emissions technology, transportation reductions, black carbon reductions, and capacity building activities.

Section 446, Assistance. The Secretary of State is authorized to provide assistance through the distribution of allowances bilaterally, through an international fund, or through a multilateral institution pursuant to the UNFCCC. Preference is given to projects that promise to achieve large-scale greenhouse gas reductions, may catalyze widespread deployment of clean technology, build institutional capacity, and leverage private resources. To the extent practicable, assistance should reinforce other foreign policy goals.

Subtitle E – Adapting to Climate Change

Part 1 – Domestic Adaptation

Subpart A – National Climate Change Adaptation Program

Section 451, National Climate Change Adaptation Program. Establishes a climate change adaptation program within the U.S. Global Change Research Program.

Section 452, Climate Services. Establishes a National Climate Service within NOAA to develop climate information, data, forecasts, and warnings at national and regional scales and to distribute information on climate impacts to state and local decisionmakers.

Section 453, State Programs to Build Resilience to Climate Change Impacts: Distributes emission allowances to states for implementation of adaptation projects, programs, or measures, contingent on the completion of an approved State Adaptation Plan. Eligible projects include, but are not limited to, those designed to respond to extreme weather events such as flooding or hurricanes, changes in water availability, heat waves, sea level rise, ecosystem disruption, and air pollution.

Subpart B – Public Health and Climate Change

Sections 461. Sense of Congress on Public Health and Climate Change: States that it is the sense of Congress that the federal government should take all means and measures to prepare for and respond to the public health impacts of climate change.

Section 462, Relationship to Other Laws: Clarifies that nothing in the subpart limits authorities or responsibilities conferred by other law.

Section 463. National Strategic Action Plan: Requires the Secretary of Health and Human Services to prepare a strategic plan to assist health professionals in preparing for and responding to the impacts of climate change on public health with disease surveillance, research,

communications, education, and training programs. Authorizes the Secretary to implement these programs using authorities under this subpart and other federal laws.

Sections 464-465, Science Advisory Board, Reports: Establishes a science advisory board to advise the Secretary on science related to the health effects of climate change. Requires a needs assessment for health effects of climate change and periodic reports on scientific developments and recommendations for updating the national strategy.

Sections 466-467. Definitions, Climate Change Health Protection and Promotion Fund: Establishes a fund in the Treasury for carrying out this subpart. Funding will be distributed by HHS but may be made available to other agencies and state and local governments. Funding will supplement, not replace other public health funding.

Subpart C – Natural Resource Adaptation

Section 471-475, Purposes, Policy, Definitions, CEQ, Resources Adaptation Panel: States that it is the policy of the federal government to use all practicable means and measures to assist natural resources to adapt to climate change. Establishes a Natural Resources Climate Change Adaptation Panel, chaired by the White House Council on Environmental Quality, as a forum for interagency coordination on natural resources adaptation.

Section 476, Natural Resources Climate Change Adaptation Strategy: Requires the Panel to develop a strategy for making natural resources more resilient to the impacts of climate change and ocean acidification. The strategy must assess likely impacts to natural resources, strategies for helping wildlife adapt, and specific actions that federal agencies should take.

Section 477, Natural Resources Climate Change Adaptation Science and Information: Establishes a process through NOAA and the U.S. Geological Survey National Global Warming and Wildlife Science Center to provide technical assistance, conduct research, and furnish decision tools, monitoring, and strategies for adaptation. Requires a survey of resources that are likely to be adversely affected and the establishment of a Science Advisory Board to advise the science program and recommend research priorities.

Section 478, Federal Natural Resource Agency Adaptation Plans: Requires federal agencies to develop natural resource adaptation plans, consistent with the National Strategy, including prioritized goals and a schedule for implementation of adaptation programs within their respective jurisdictions.

Section 479, State Natural Resources Adaptation Plans: Requires states to develop Natural Resources Adaptation Plans as a condition for receiving funds under the programs in this subtitle.

Section 480, Natural Resources Climate Change Adaptation Fund: Establishes a Natural Resources Climate Change Adaptation Fund. Amounts in the fund will be distributed as follows:

38.5% of funds to states (32.5% for the Pittman-Robertson Wildlife Restoration Act, 6% for the Coastal Management Act); 17% of funds to the Department of the Interior for endangered species, bird, and Fish and Wildlife Service programs, wildlife refuges, and the Bureau of Reclamation; 5% to the Department of the Interior (DOI) for cooperative grant programs; 3% for tribes; 12% to the Land and Water Conservation Fund (1/6 to DOI for competitive grants, 1/3 for land acquisition under §7 of the Land and Water Conservation Fund Act, 1/3 to the Department of Agriculture for land acquisition, 1/6 to USDA for the Forestry Assistance Act); 5% to USDA for the Forest Service; 7.5% to EPA for freshwater ecosystems; 5% to the Army Corps of Engineers for freshwater ecosystems; and 7.5% to NOAA for coastal and marine ecosystems. All funds authorized must be used for adaptation activities, consistent with federal plans.

Section 481, National Wildlife Habitat and Corridors Information Program: Establishes a program in the Department of the Interior to support States and tribes in the development of a GIS database of fish and wildlife habitat corridors, and to facilitate the use of database tools in wildlife management programs.

Section 482, Additional Provisions Regarding Indian Tribes: Clarifies that nothing in this subpart amends federal trust responsibilities to tribes, exempts information on Indian tribe sacred sites or cultural activities from FOIA, and clarifies that the Department of the Interior may apply the provisions of the Indian Self-Determination and Education Assistance Act as appropriate.

Part 2 – International Climate Change Adaptation Program

Sections 491 –493, Findings and Purposes, Definitions, International Climate Change Adaptation: Establishes an International Climate Change Adaptation Program within USAID to provide U.S. assistance to the most vulnerable developing countries for adaptation to climate change. Resources allocated to this program will supplement and not replace other international adaptation assistance.

Section 494, Distribution of Allowances: The Administrator of USAID shall distribute allowances bilaterally and through multilateral funds or institutions pursuant to the UNFCCC. Multilateral institutions must receive between 40 and 60% of allowances; multilateral fund eligibility is contingent on developing world participation, transparency requirements, and community engagement.

Sections 495, Bilateral Assistance. The Administrator of USAID shall distribute allowances through public or private organizations to provide assistance to the most vulnerable developing countries for adaptation efforts. The Administrator must prioritize assistance based on vulnerability to climate change. The bilateral assistance program must ensure community engagement and consultation, and will seek to align broader US foreign policy goals with its assistance. The program may use its assistance to support projects, policies, or programs, or to build program capacity in developing countries.

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