

ENERGY AND WATER DEVELOPMENT AND RELATED  
AGENCIES FOR THE FISCAL YEAR ENDING SEPTEMBER  
30, 2019, AND FOR OTHER PURPOSES

SEPTEMBER 10, 2018.—Ordered to be printed

Mr. SIMPSON, from the committee of conference,  
submitted the following

CONFERENCE REPORT

[To accompany H.R. 5895]

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 5895), making appropriations for the energy and water development and related agencies for the fiscal year ending September 30, 2019, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the Senate amendment, insert the following:

**SECTION 1. SHORT TITLE.**

*This Act may be cited as the “Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019”.*

**SEC. 2. TABLE OF CONTENTS.**

*The table of contents of this Act is as follows:*

- Sec. 1. Short title.*
- Sec. 2. Table of contents.*
- Sec. 3. References.*
- Sec. 4. Statement of appropriations.*

*DIVISION A—ENERGY AND WATER DEVELOPMENT AND RELATED  
AGENCIES APPROPRIATIONS ACT, 2019*

*Title I—Corps of Engineers—Civil*  
*Title II—Department of the Interior*  
*Title III—Department of Energy*  
*Title IV—Independent Agencies*  
*Title V—General Provisions*

*DIVISION B—LEGISLATIVE BRANCH APPROPRIATIONS ACT, 2019*

*Title I—Legislative Branch*  
*Title II—General Provisions*

*DIVISION C—MILITARY CONSTRUCTION, VETERANS AFFAIRS, AND  
RELATED AGENCIES APPROPRIATIONS ACT, 2019*

*Title I—Department of Defense*  
*Title II—Department of Veterans Affairs*  
*Title III—Related Agencies*  
*Title IV—Overseas Contingency Operations*  
*Title V—General Provisions*

**SEC. 3. REFERENCES.**

*Except as expressly provided otherwise, any reference to “this Act” contained in any division of this Act shall be treated as referring only to the provisions of that division.*

**SEC. 4. STATEMENT OF APPROPRIATIONS.**

*The following sums in this Act are appropriated, out of any money in the Treasury not otherwise appropriated, for the fiscal year ending September 30, 2019.*

***DIVISION A—ENERGY AND WATER DEVELOPMENT AND  
RELATED AGENCIES APPROPRIATIONS ACT, 2019***

***TITLE I***

***CORPS OF ENGINEERS—CIVIL***

***DEPARTMENT OF THE ARMY***

***CORPS OF ENGINEERS—CIVIL***

*The following appropriations shall be expended under the direction of the Secretary of the Army and the supervision of the Chief of Engineers for authorized civil functions of the Department of the Army pertaining to river and harbor, flood and storm damage reduction, shore protection, aquatic ecosystem restoration, and related efforts.*

***INVESTIGATIONS***

*For expenses necessary where authorized by law for the collection and study of basic information pertaining to river and harbor,*

(b) *The costs of the Kesterson Reservoir Cleanup Program and the costs of the San Joaquin Valley Drainage Program shall be classified by the Secretary of the Interior as reimbursable or nonreimbursable and collected until fully repaid pursuant to the "Cleanup Program—Alternative Repayment Plan" and the "SJVDP—Alternative Repayment Plan" described in the report entitled "Repayment Report, Kesterson Reservoir Cleanup Program and San Joaquin Valley Drainage Program, February 1995", prepared by the Department of the Interior, Bureau of Reclamation. Any future obligations of funds by the United States relating to, or providing for, drainage service or drainage studies for the San Luis Unit shall be fully reimbursable by San Luis Unit beneficiaries of such service or studies pursuant to Federal reclamation law.*

*SEC. 203. Hereinafter, notwithstanding any other provision of law, during the period from November 1 through April 30, water users may use their diversion structures for the purpose of recharging the Eastern Snake Plain Aquifer, when the Secretary, in consultation with the Advisory Committee and Water District 1 watermaster, determines there is water available in excess of that needed to satisfy existing Minidoka Project storage and hydropower rights and ensure operational flexibility.*

*SEC. 204. Section 9001(d) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 1295) is amended by striking "10" and inserting "20".*

*SEC. 205. (a) Section 206(c)(2) of the Energy and Water Development and Related Agencies Appropriations Act, 2015 (43 U.S.C. 620 note; Public Law 113–235) is amended by striking "2018." and inserting the following: "2022: Provided, That the Secretary shall not fund pilot projects in the Upper Colorado River Basin without the participation of the Upper Colorado River Division States, acting through the Upper Colorado River Commission."*

*(b) Section 9504(e) of the Secure Water Act of 2009 (42 U.S.C. 10364(e)) is amended by striking "\$450,000,000" and inserting "\$480,000,000".*

*SEC. 206. Section 9 of the Fort Peck Reservation Rural Water System Act of 2000 (Public Law 106–382; 114 Stat. 1457, 123 Stat. 2856, 128 Stat. 164) is amended by striking "2020" each place it appears in subsections (a)(1) and (b) and inserting "2026".*

### TITLE III

#### DEPARTMENT OF ENERGY

#### ENERGY PROGRAMS

#### ENERGY EFFICIENCY AND RENEWABLE ENERGY

*For Department of Energy expenses including the purchase, construction, and acquisition of plant and capital equipment, and other expenses necessary for energy efficiency and renewable energy activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, \$2,379,000,000, to remain available until expended: Provided, That of such amount,*

*\$162,500,000 shall be available until September 30, 2020, for program direction.*

#### *CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE*

*For Department of Energy expenses including the purchase, construction, and acquisition of plant and capital equipment, and other expenses necessary for energy sector cybersecurity, energy security, and emergency response activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, \$120,000,000, to remain available until expended: Provided, That of such amount, \$11,500,000 shall be available until September 30, 2020, for program direction.*

#### *ELECTRICITY DELIVERY*

*For Department of Energy expenses including the purchase, construction, and acquisition of plant and capital equipment, and other expenses necessary for electricity delivery activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, \$156,000,000, to remain available until expended: Provided, That of such amount, \$17,000,000 shall be available until September 30, 2020, for program direction.*

#### *NUCLEAR ENERGY*

*For Department of Energy expenses including the purchase, construction, and acquisition of plant and capital equipment, and other expenses necessary for nuclear energy activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, \$1,326,090,000, to remain available until expended: Provided, That of such amount, \$80,000,000 shall be available until September 30, 2020, for program direction.*

#### *FOSSIL ENERGY RESEARCH AND DEVELOPMENT*

*For Department of Energy expenses necessary in carrying out fossil energy research and development activities, under the authority of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition of interest, including defeasible and equitable interests in any real property or any facility or for plant or facility acquisition or expansion, and for conducting inquiries, technological investigations and research concerning the extraction, processing, use, and disposal of mineral substances without objectionable social and environmental costs (30 U.S.C. 3, 1602, and 1603), \$740,000,000, to remain available until expended: Provided, That of such amount \$61,070,000 shall be available until September 30, 2020, for program direction.*

## NAVAL PETROLEUM AND OIL SHALE RESERVES

*For Department of Energy expenses necessary to carry out naval petroleum and oil shale reserve activities, \$10,000,000, to remain available until expended: Provided, That notwithstanding any other provision of law, unobligated funds remaining from prior years shall be available for all naval petroleum and oil shale reserve activities.*

### STRATEGIC PETROLEUM RESERVE

*For Department of Energy expenses necessary for Strategic Petroleum Reserve facility development and operations and program management activities pursuant to the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.), \$235,000,000, to remain available until expended: Provided, That, as authorized by section 404 of the Bipartisan Budget Act of 2015 (Public Law 114-74; 42 U.S.C. 6239 note), the Secretary of Energy shall draw down and sell not to exceed \$300,000,000 of crude oil from the Strategic Petroleum Reserve in fiscal year 2019: Provided further, That the proceeds from such drawdown and sale shall be deposited into the "Energy Security and Infrastructure Modernization Fund" during fiscal year 2019: Provided further, That such amounts shall be made available and shall remain available until expended for necessary expenses to carry out the Life Extension II project for the Strategic Petroleum Reserve.*

### SPR PETROLEUM ACCOUNT

*For the acquisition, transportation, and injection of petroleum products, and for other necessary expenses pursuant to the Energy Policy and Conservation Act of 1975, as amended (42 U.S.C. 6201 et seq.), sections 403 and 404 of the Bipartisan Budget Act of 2015 (42 U.S.C. 6241, 6239 note), and section 5010 of the 21st Century Cures Act (Public Law 114-255), \$10,000,000, to remain available until expended.*

### NORTHEAST HOME HEATING OIL RESERVE

*For Department of Energy expenses necessary for Northeast Home Heating Oil Reserve storage, operation, and management activities pursuant to the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.), \$10,000,000, to remain available until expended.*

### ENERGY INFORMATION ADMINISTRATION

*For Department of Energy expenses necessary in carrying out the activities of the Energy Information Administration, \$125,000,000, to remain available until expended.*

### NON-DEFENSE ENVIRONMENTAL CLEANUP

*For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other expenses necessary for non-defense environmental cleanup activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition*

*or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, \$310,000,000, to remain available until expended.*

#### URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND

*For Department of Energy expenses necessary in carrying out uranium enrichment facility decontamination and decommissioning, remedial actions, and other activities of title II of the Atomic Energy Act of 1954, and title X, subtitle A, of the Energy Policy Act of 1992, \$841,129,000, to be derived from the Uranium Enrichment Decontamination and Decommissioning Fund, to remain available until expended, of which \$11,000,000 shall be available in accordance with title X, subtitle A, of the Energy Policy Act of 1992, including for the purchase of not to exceed one ambulance for replacement only.*

#### SCIENCE

*For Department of Energy expenses including the purchase, construction, and acquisition of plant and capital equipment, and other expenses necessary for science activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, and purchase of not more than 16 passenger motor vehicles including one bus, and one airplane for replacement only, \$6,585,000,000, to remain available until expended: Provided, That of such amount, \$183,000,000 shall be available until September 30, 2020, for program direction.*

#### ADVANCED RESEARCH PROJECTS AGENCY—ENERGY

*For Department of Energy expenses necessary in carrying out the activities authorized by section 5012 of the America COMPETES Act (Public Law 110–69), \$366,000,000, to remain available until expended: Provided, That of such amount, \$31,250,000 shall be available until September 30, 2020, for program direction.*

#### TITLE 17 INNOVATIVE TECHNOLOGY LOAN GUARANTEE PROGRAM

*Such sums as are derived from amounts received from borrowers pursuant to section 1702(b) of the Energy Policy Act of 2005 under this heading in prior Acts, shall be collected in accordance with section 502(7) of the Congressional Budget Act of 1974: Provided, That for necessary administrative expenses of the Title 17 Innovative Technology Loan Guarantee Program, as authorized, \$33,000,000 is appropriated, to remain available until September 30, 2020: Provided further, That up to \$33,000,000 of fees collected in fiscal year 2019 pursuant to section 1702(h) of the Energy Policy Act of 2005 shall be credited as offsetting collections under this heading and used for necessary administrative expenses in this appropriation and shall remain available until September 30, 2020: Provided further, That to the extent that fees collected in fiscal year 2019 exceed \$33,000,000, those excess amounts shall be credited as offsetting collections under this heading and available in future fis-*

*cal years only to the extent provided in advance in appropriations Acts: Provided further, That the sum herein appropriated from the general fund shall be reduced (1) as such fees are received during fiscal year 2019 (estimated at \$15,000,000) and (2) to the extent that any remaining general fund appropriations can be derived from fees collected in previous fiscal years that are not otherwise appropriated, so as to result in a final fiscal year 2019 appropriation from the general fund estimated at \$0: Provided further, That the Department of Energy shall not subordinate any loan obligation to other financing in violation of section 1702 of the Energy Policy Act of 2005 or subordinate any Guaranteed Obligation to any loan or other debt obligations in violation of section 609.10 of title 10, Code of Federal Regulations.*

#### *ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PROGRAM*

*For Department of Energy administrative expenses necessary in carrying out the Advanced Technology Vehicles Manufacturing Loan Program, \$5,000,000, to remain available until September 30, 2020.*

#### *TRIBAL ENERGY LOAN GUARANTEE PROGRAM*

*For Department of Energy administrative expenses necessary in carrying out the Tribal Energy Loan Guarantee Program, \$1,000,000, to remain available until September 30, 2020.*

#### *OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS*

*For necessary expenses for Indian Energy activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), \$18,000,000, to remain available until expended: Provided, That, of the amount appropriated under this heading, \$4,800,000 shall be available until September 30, 2020, for program direction.*

#### *DEPARTMENTAL ADMINISTRATION*

*For salaries and expenses of the Department of Energy necessary for departmental administration in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), \$261,858,000, to remain available until September 30, 2020, including the hire of passenger motor vehicles and official reception and representation expenses not to exceed \$30,000, plus such additional amounts as necessary to cover increases in the estimated amount of cost of work for others notwithstanding the provisions of the Anti-Deficiency Act (31 U.S.C. 1511 et seq.): Provided, That such increases in cost of work are offset by revenue increases of the same or greater amount: Provided further, That moneys received by the Department for miscellaneous revenues estimated to total \$96,000,000 in fiscal year 2019 may be retained and used for operating expenses within this account, as authorized by section 201 of Public Law 95-238, notwithstanding the provisions of 31 U.S.C. 3302: Provided further, That the sum herein appropriated shall be reduced as collections are received during the fiscal year so as to re-*

*sult in a final fiscal year 2019 appropriation from the general fund estimated at not more than \$165,858,000.*

*OFFICE OF THE INSPECTOR GENERAL*

*For expenses necessary for the Office of the Inspector General in carrying out the provisions of the Inspector General Act of 1978, \$51,330,000, to remain available until September 30, 2020.*

*ATOMIC ENERGY DEFENSE ACTIVITIES*

*NATIONAL NUCLEAR SECURITY ADMINISTRATION*

*WEAPONS ACTIVITIES*

*For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other incidental expenses necessary for atomic energy defense weapons activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, and the purchase of not to exceed one ambulance for replacement only, \$11,100,000,000, to remain available until expended: Provided, That of such amount, \$102,022,000 shall be available until September 30, 2020, for program direction.*

*DEFENSE NUCLEAR NONPROLIFERATION*

*(INCLUDING RESCISSION OF FUNDS)*

*For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other incidental expenses necessary for defense nuclear nonproliferation activities, in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, and the purchase of not to exceed three aircraft, \$1,949,000,000, to remain available until expended: Provided, That of such amount, \$25,000,000 shall be made available for design activities supporting the dilute and dispose strategy for plutonium disposition: Provided further, That none of the funds made available under this heading shall be made available for the construction activities or acquisition of equipment for the Surplus Plutonium Disposition Project: Provided further, That of the unobligated balances from prior year appropriations available under this heading, \$19,000,000 is hereby rescinded: Provided further, That no amounts may be rescinded from amounts that were designated by the Congress as an emergency requirement pursuant to the Concurrent Resolution on the Budget or the Balanced Budget and Emergency Deficit Control Act of 1985.*

*NAVAL REACTORS*

*(INCLUDING TRANSFER OF FUNDS)*

*For Department of Energy expenses necessary for naval reactors activities to carry out the Department of Energy Organization Act*



*(42 U.S.C. 7101 et seq.), including the acquisition (by purchase, condemnation, construction, or otherwise) of real property, plant, and capital equipment, facilities, and facility expansion, \$1,788,618,000, to remain available until expended, of which, \$85,500,000 shall be transferred to "Department of Energy—Energy Programs—Nuclear Energy", for the Advanced Test Reactor: Provided, That of such amount, \$48,709,000 shall be available until September 30, 2020, for program direction.*

#### FEDERAL SALARIES AND EXPENSES

*For expenses necessary for Federal Salaries and Expenses in the National Nuclear Security Administration, \$410,000,000, to remain available until September 30, 2020, including official reception and representation expenses not to exceed \$12,000.*

#### ENVIRONMENTAL AND OTHER DEFENSE ACTIVITIES

##### DEFENSE ENVIRONMENTAL CLEANUP

*(INCLUDING RESCISSION OF FUNDS)*

*For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other expenses necessary for atomic energy defense environmental cleanup activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, and the purchase of not to exceed one passenger minivan for replacement only, \$6,028,600,000, to remain available until expended: Provided, That of such amount, \$298,500,000 shall be available until September 30, 2020, for program direction: Provided further, That of the unobligated balances from prior year appropriations available under this heading, \$4,600,000 is hereby rescinded: Provided further, That no amounts may be rescinded from amounts that were designated by the Congress as an emergency requirement pursuant to the Concurrent Resolution on the Budget or the Balanced Budget and Emergency Deficit Control Act of 1985.*

##### OTHER DEFENSE ACTIVITIES

*For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other expenses, necessary for atomic energy defense, other defense activities, and classified activities, in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, \$860,292,000, to remain available until expended: Provided, That of such amount, \$295,432,000 shall be available until September 30, 2020, for program direction.*

## POWER MARKETING ADMINISTRATIONS

### BONNEVILLE POWER ADMINISTRATION FUND

*Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for official reception and representation expenses in an amount not to exceed \$5,000: Provided, That during fiscal year 2019, no new direct loan obligations may be made.*

### OPERATION AND MAINTENANCE, SOUTHEASTERN POWER ADMINISTRATION

*For expenses necessary for operation and maintenance of power transmission facilities and for marketing electric power and energy, including transmission wheeling and ancillary services, pursuant to section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), as applied to the southeastern power area, \$6,500,000, including official reception and representation expenses in an amount not to exceed \$1,500, to remain available until expended: Provided, That notwithstanding 31 U.S.C. 3302 and section 5 of the Flood Control Act of 1944, up to \$6,500,000 collected by the Southeastern Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended for the sole purpose of funding the annual expenses of the Southeastern Power Administration: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2019 appropriation estimated at not more than \$0: Provided further, That notwithstanding 31 U.S.C. 3302, up to \$55,000,000 collected by the Southeastern Power Administration pursuant to the Flood Control Act of 1944 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses).*

### OPERATION AND MAINTENANCE, SOUTHWESTERN POWER ADMINISTRATION

*For expenses necessary for operation and maintenance of power transmission facilities and for marketing electric power and energy, for construction and acquisition of transmission lines, substations and appurtenant facilities, and for administrative expenses, including official reception and representation expenses in an amount not to exceed \$1,500 in carrying out section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), as applied to the Southwestern Power Administration, \$45,802,000, to remain available until expended: Provided, That notwithstanding 31 U.S.C. 3302 and section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), up to \$35,402,000 collected by the Southwestern Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended, for the sole purpose of funding the annual expenses of the South-*

*western Power Administration: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2019 appropriation estimated at not more than \$10,400,000: Provided further, That notwithstanding 31 U.S.C. 3302, up to \$50,000,000 collected by the Southwestern Power Administration pursuant to the Flood Control Act of 1944 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses).*

**CONSTRUCTION, REHABILITATION, OPERATION AND MAINTENANCE,  
WESTERN AREA POWER ADMINISTRATION**

*For carrying out the functions authorized by title III, section 302(a)(1)(E) of the Act of August 4, 1977 (42 U.S.C. 7152), and other related activities including conservation and renewable resources programs as authorized, \$265,142,000, including official reception and representation expenses in an amount not to exceed \$1,500, to remain available until expended, of which \$265,142,000 shall be derived from the Department of the Interior Reclamation Fund: Provided, That notwithstanding 31 U.S.C. 3302, section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s), and section 1 of the Interior Department Appropriation Act, 1939 (43 U.S.C. 392a), up to \$175,770,000 collected by the Western Area Power Administration from the sale of power and related services shall be credited to this account as discretionary offsetting collections, to remain available until expended, for the sole purpose of funding the annual expenses of the Western Area Power Administration: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2019 appropriation estimated at not more than \$89,372,000, of which \$89,372,000 is derived from the Reclamation Fund: Provided further, That notwithstanding 31 U.S.C. 3302, up to \$225,442,000 collected by the Western Area Power Administration pursuant to the Flood Control Act of 1944 and the Reclamation Project Act of 1939 to recover purchase power and wheeling expenses shall be credited to this account as offsetting collections, to remain available until expended for the sole purpose of making purchase power and wheeling expenditures: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred (excluding purchase power and wheeling expenses).*

**FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND**

*For operation, maintenance, and emergency costs for the hydroelectric facilities at the Falcon and Amistad Dams, \$1,568,000, to remain available until expended, and to be derived from the Falcon and Amistad Operating and Maintenance Fund of the Western Area Power Administration, as provided in section 2 of the Act of June 18, 1954 (68 Stat. 255): Provided, That notwithstanding the provi-*

sions of that Act and of 31 U.S.C. 3302, up to \$1,340,000 collected by the Western Area Power Administration from the sale of power and related services from the Falcon and Amistad Dams shall be credited to this account as discretionary offsetting collections, to remain available until expended for the sole purpose of funding the annual expenses of the hydroelectric facilities of these Dams and associated Western Area Power Administration activities: Provided further, That the sum herein appropriated for annual expenses shall be reduced as collections are received during the fiscal year so as to result in a final fiscal year 2019 appropriation estimated at not more than \$228,000: Provided further, That for purposes of this appropriation, annual expenses means expenditures that are generally recovered in the same year that they are incurred: Provided further, That for fiscal year 2019, the Administrator of the Western Area Power Administration may accept up to \$372,000 in funds contributed by United States power customers of the Falcon and Amistad Dams for deposit into the Falcon and Amistad Operating and Maintenance Fund, and such funds shall be available for the purpose for which contributed in like manner as if said sums had been specifically appropriated for such purpose: Provided further, That any such funds shall be available without further appropriation and without fiscal year limitation for use by the Commissioner of the United States Section of the International Boundary and Water Commission for the sole purpose of operating, maintaining, repairing, rehabilitating, replacing, or upgrading the hydroelectric facilities at these Dams in accordance with agreements reached between the Administrator, Commissioner, and the power customers.

## FEDERAL ENERGY REGULATORY COMMISSION

### SALARIES AND EXPENSES

For expenses necessary for the Federal Energy Regulatory Commission to carry out the provisions of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including services as authorized by 5 U.S.C. 3109, official reception and representation expenses not to exceed \$3,000, and the hire of passenger motor vehicles, \$369,900,000, to remain available until expended: Provided, That notwithstanding any other provision of law, not to exceed \$369,900,000 of revenues from fees and annual charges, and other services and collections in fiscal year 2019 shall be retained and used for expenses necessary in this account, and shall remain available until expended: Provided further, That the sum herein appropriated from the general fund shall be reduced as revenues are received during fiscal year 2019 so as to result in a final fiscal year 2019 appropriation from the general fund estimated at not more than \$0.

## GENERAL PROVISIONS—DEPARTMENT OF ENERGY

### (INCLUDING TRANSFERS OF FUNDS)

SEC. 301. (a) No appropriation, funds, or authority made available by this title for the Department of Energy shall be used to initiate or resume any program, project, or activity or to prepare or initiate Requests For Proposals or similar arrangements (including Requests for Quotations, Requests for Information, and Funding Op-

portunity Announcements) for a program, project, or activity if the program, project, or activity has not been funded by Congress.

(b)(1) Unless the Secretary of Energy notifies the Committees on Appropriations of both Houses of Congress at least 3 full business days in advance, none of the funds made available in this title may be used to—

(A) make a grant allocation or discretionary grant award totaling \$1,000,000 or more;

(B) make a discretionary contract award or Other Transaction Agreement totaling \$1,000,000 or more, including a contract covered by the Federal Acquisition Regulation;

(C) issue a letter of intent to make an allocation, award, or Agreement in excess of the limits in subparagraph (A) or (B); or

(D) announce publicly the intention to make an allocation, award, or Agreement in excess of the limits in subparagraph (A) or (B).

(2) The Secretary of Energy shall submit to the Committees on Appropriations of both Houses of Congress within 15 days of the conclusion of each quarter a report detailing each grant allocation or discretionary grant award totaling less than \$1,000,000 provided during the previous quarter.

(3) The notification required by paragraph (1) and the report required by paragraph (2) shall include the recipient of the award, the amount of the award, the fiscal year for which the funds for the award were appropriated, the account and program, project, or activity from which the funds are being drawn, the title of the award, and a brief description of the activity for which the award is made.

(c) The Department of Energy may not, with respect to any program, project, or activity that uses budget authority made available in this title under the heading “Department of Energy—Energy Programs”, enter into a multiyear contract, award a multiyear grant, or enter into a multiyear cooperative agreement unless—

(1) the contract, grant, or cooperative agreement is funded for the full period of performance as anticipated at the time of award; or

(2) the contract, grant, or cooperative agreement includes a clause conditioning the Federal Government’s obligation on the availability of future year budget authority and the Secretary notifies the Committees on Appropriations of both Houses of Congress at least 3 days in advance.

(d) Except as provided in subsections (e), (f), and (g), the amounts made available by this title shall be expended as authorized by law for the programs, projects, and activities specified in the “Conference” column in the “Department of Energy” table included under the heading “Title III—Department of Energy” in the joint explanatory statement accompanying this Act.

(e) The amounts made available by this title may be reprogrammed for any program, project, or activity, and the Department shall notify, and obtain the prior approval of, the Committees on Appropriations of both Houses of Congress at least 30 days prior to the use of any proposed reprogramming that would cause any program, project, or activity funding level to increase or decrease by more than \$5,000,000 or 10 percent, whichever is less, during the time period covered by this Act.

(f) None of the funds provided in this title shall be available for obligation or expenditure through a reprogramming of funds that—

(1) creates, initiates, or eliminates a program, project, or activity;

(2) increases funds or personnel for any program, project, or activity for which funds are denied or restricted by this Act; or

(3) reduces funds that are directed to be used for a specific program, project, or activity by this Act.

(g)(1) The Secretary of Energy may waive any requirement or restriction in this section that applies to the use of funds made available for the Department of Energy if compliance with such requirement or restriction would pose a substantial risk to human health, the environment, welfare, or national security.

(2) The Secretary of Energy shall notify the Committees on Appropriations of both Houses of Congress of any waiver under paragraph (1) as soon as practicable, but not later than 3 days after the date of the activity to which a requirement or restriction would otherwise have applied. Such notice shall include an explanation of the substantial risk under paragraph (1) that permitted such waiver.

(h) The unexpended balances of prior appropriations provided for activities in this Act may be available to the same appropriation accounts for such activities established pursuant to this title. Available balances may be merged with funds in the applicable established accounts and thereafter may be accounted for as one fund for the same time period as originally enacted.

SEC. 302. Funds appropriated by this or any other Act, or made available by the transfer of funds in this Act, for intelligence activities are deemed to be specifically authorized by the Congress for purposes of section 504 of the National Security Act of 1947 (50 U.S.C. 3094) during fiscal year 2019 until the enactment of the Intelligence Authorization Act for fiscal year 2019.

SEC. 303. None of the funds made available in this title shall be used for the construction of facilities classified as high-hazard nuclear facilities under 10 CFR Part 830 unless independent oversight is conducted by the Office of Enterprise Assessments to ensure the project is in compliance with nuclear safety requirements.

SEC. 304. None of the funds made available in this title may be used to approve critical decision-2 or critical decision-3 under Department of Energy Order 413.3B, or any successive departmental guidance, for construction projects where the total project cost exceeds \$100,000,000, until a separate independent cost estimate has been developed for the project for that critical decision.

SEC. 305. The Secretary of Energy may not transfer more than \$274,833,000 from the amounts made available under this title to the working capital fund established under section 653 of the Department of Energy Organization Act (42 U.S.C. 7263): Provided, That the Secretary may transfer additional amounts to the working capital fund after the Secretary provides notification in advance of any such transfer to the Committees on Appropriations of both Houses of Congress: Provided further, That any such notification shall identify the sources of funds by program, project, or activity: Provided further, That the Secretary shall notify the Committees on Appropriations of both Houses of Congress before adding or removing any activities from the fund.

SEC. 306. (a) None of the funds made available in this or any prior Act under the heading "Defense Nuclear Nonproliferation" may be made available to enter into new contracts with, or new agreements for Federal assistance to, the Russian Federation.

(b) The Secretary of Energy may waive the prohibition in subsection (a) if the Secretary determines that such activity is in the national security interests of the United States. This waiver authority may not be delegated.

(c) A waiver under subsection (b) shall not be effective until 15 days after the date on which the Secretary submits to the Committees on Appropriations of both Houses of Congress, in classified form if necessary, a report on the justification for the waiver.

SEC. 307. (a) NEW REGIONAL RESERVES.—The Secretary of Energy may not establish any new regional petroleum product reserve unless funding for the proposed regional petroleum product reserve is explicitly requested in advance in an annual budget submission and approved by the Congress in an appropriations Act.

(b) The budget request or notification shall include—

- (1) the justification for the new reserve;
- (2) a cost estimate for the establishment, operation, and maintenance of the reserve, including funding sources;
- (3) a detailed plan for operation of the reserve, including the conditions upon which the products may be released;
- (4) the location of the reserve; and
- (5) the estimate of the total inventory of the reserve.

SEC. 308. Notwithstanding section 161 of the Energy Policy and Conservation Act (42 U.S.C. 6241), upon a determination by the President in this fiscal year that a regional supply shortage of refined petroleum product of significant scope and duration exists, that a severe increase in the price of refined petroleum product will likely result from such shortage, and that a draw down and sale of refined petroleum product would assist directly and significantly in reducing the adverse impact of such shortage, the Secretary of Energy may draw down and sell refined petroleum product from the Strategic Petroleum Reserve. Proceeds from a sale under this section shall be deposited into the SPR Petroleum Account established in section 167 of the Energy Policy and Conservation Act (42 U.S.C. 6247), and such amounts shall be available for obligation, without fiscal year limitation, consistent with that section.

## TITLE IV

### INDEPENDENT AGENCIES

#### APPALACHIAN REGIONAL COMMISSION

For expenses necessary to carry out the programs authorized by the Appalachian Regional Development Act of 1965, and for expenses necessary for the Federal Co-Chairman and the Alternate on the Appalachian Regional Commission, for payment of the Federal share of the administrative expenses of the Commission, including services as authorized by 5 U.S.C. 3109, and hire of passenger motor vehicles, \$165,000,000, to remain available until expended.

## GENERAL PROVISIONS—DEPARTMENT OF THE INTERIOR

The agreement includes a provision outlining the circumstances under which the Bureau of Reclamation may reprogram funds.

The agreement includes a provision regarding the San Luis Unit and Kesterson Reservoir in California.

The agreement includes a provision regarding aquifer recharge at a project.

The agreement includes a provision regarding a feasibility study.

The agreement includes a provision regarding a pilot program in the Colorado River Basin and authorization of appropriations under the Secure Water Act.

The agreement includes a provision regarding a rural water project.

## TITLE III—DEPARTMENT OF ENERGY

The conferees provide \$35,685,317,000 for the Department of Energy to fund programs in its primary mission areas of science, energy, environment, and national security.

Not later than 120 days after the enactment of this Act, the Secretary of Energy, in consultation with the Secretary of Defense, shall submit to the congressional energy and defense committees a report evaluating military installations at which it would be cost-effective to establish partnerships with community colleges, institutions of higher education, and the private sector to train veterans and members of the armed forces transitioning to civilian life to enter the cybersecurity, energy, and artificial intelligence workforces.

*Research and Development Policy.*—The Department is directed throughout all of its programs to maintain a diverse portfolio of early-, mid-, and late-stage research, development, and market transformation activities. The Department is further directed to fully execute the funds appropriated in a timely manner and to keep the Committees on Appropriations of both Houses of Congress apprised of progress in implementing funded programs, projects, and activities.

## REPROGRAMMING REQUIREMENTS

The agreement carries the Department's reprogramming authority in statute to ensure that the Department carries out its programs consistent with congressional direction. The Department shall, when possible, submit consolidated, cumulative notifications to the Committees on Appropriations of both Houses of Congress.

*Definition.*—A reprogramming includes the reallocation of funds from one program, project, or activity to another within an appropriation. For construction projects, a reprogramming constitutes the reallocation of funds from one construction project to another project or a change of \$2,000,000 or 10 percent, whichever is less, in the scope of an approved project.



## ENERGY PROGRAMS

## ENERGY EFFICIENCY AND RENEWABLE ENERGY

The conferees provide \$2,379,000,000 for Energy Efficiency and Renewable Energy (EERE).

The Department is directed to maintain a diverse portfolio of early-, mid-, and late-stage research, development, and market transformation activities. The Department is further directed to fully execute the funds appropriated in a timely manner and to keep the Committees on Appropriations of both Houses of Congress apprised of progress in implementing funded programs, projects, and activities. Priority shall be given to stewarding the assets and optimizing the operations of EERE designated user facilities across the Department's complex. In future budget submissions, the Department is directed to demonstrate a commitment to operations and maintenance of facilities that support the Department's critical missions within EERE.

The Department is directed to provide to the Committees on Appropriations of both Houses of Congress not later than 180 days after the enactment of this Act a report on research and development activities that support the utilization and advancement of high-efficiency linear generator power plant technologies and how these technologies can be incorporated into other EERE programs.

Within available funds for EERE, the conferees include not less than \$20,000,000 to bring cybersecurity into early-stage technology R&D so that it is built into new technology for this effort to encompass all EERE programs. Within 180 days of enactment of this Act, the Department shall submit to the Committees on Appropriations of both Houses of Congress a multi-year program plan for this effort to encompass all EERE programs.

## SUSTAINABLE TRANSPORTATION

*Vehicle Technologies.*—Within available funds, the conferees include \$7,000,000 for operations and maintenance of the National Transportation Research Center; not less than \$163,200,000 for Battery and Electrification Technologies; not less than \$38,100,000 for electric drive research and development, of which \$7,000,000 is to enable extreme fast charging and advanced battery analytics; not less than \$30,000,000 for Materials Technology; not less than \$12,500,000 for the Co-Optimization of Engine and Fuels Multi-Laboratory Consortium; \$25,000,000 for early-stage research on multi-material joining and propulsion materials at the national laboratories, and carbon fiber-reinforced composites at the Carbon Fiber Technology Facility; and \$10,000,000 for continued funding of Section 131 of the 2007 Energy Independence and Security Act for transportation electrification. The agreement provides \$20,000,000 for the five awards under the SuperTruck II program to further improve the efficiency of heavy-duty class 8 long- and regional-haul vehicles. The Department is directed to continue to support the Clean Cities program, including competitive grants to support alternative fuel, infrastructure, and vehicle deployment activities. The agreement provides \$46,300,000 for Outreach, Deployment, and Analysis. Within this amount, \$37,800,000 is provided for De-

ployment through the Clean Cities Program and \$2,500,000 is for a new 4-year collegiate engineering competition, EcoCAR4. Within available funds, the agreement provides \$15,000,000 for medium- and heavy-duty on-road natural gas engine research and development to address technical barriers to the increased use of natural gas vehicles.

*Bioenergy Technologies.*—Within available funds, the conferees include \$30,000,000 for feedstock supply and logistics, of which \$14,000,000 is for the national lab consortium and \$5,000,000 is for upgrades at the Biomass Feedstock National User Facility to extend its capabilities and maximize benefits; \$32,000,000 for algal biofuels, of which \$2,000,000 is for further research and development activities to support carbon capture from the atmosphere (ambient air) using algae-to-energy technologies; \$57,500,000 for Demonstration and Market Transformation, of which not less than \$12,500,000 is for the Co-Optimization of Engine and Fuels Multi-Laboratory Consortium; and \$95,000,000 for Conversion Technologies. Within available funds, \$5,000,000 is to continue the biopower program, \$5,000,000 is to improve the efficiency of community and smaller digesters that accept both farm and food wastes, and \$5,000,000 is to support development and testing of new domestic manufactured low-emission, high-efficiency, residential wood heaters. Within available funds, the agreement includes not less than \$10,000,000 to establish a multi-university partnership to conduct research and enhance educational programs that improve alternative energy production derived from urban and suburban wastes. The Department is directed to collaborate with institutions in Canada and Mexico to leverage capacity and capitalize on North American resources.

*Hydrogen and Fuel Cell Technologies.*—Within available funds, the agreement provides \$21,000,000 for Technology Acceleration activities, including \$3,000,000 for manufacturing research and development and \$7,000,000 for industry-led efforts to demonstrate a hydrogen-focused integrated renewable energy production, storage, and transportation fuel distribution/retailing system. Within available funds, the agreement provides \$4,000,000 for the EERE share of the integrated energy systems work with the Office of Nuclear Energy and \$7,000,000 to enable integrated energy systems using high and low temperature electrolyzers with the intent of advancing the H2@Scale concept. The conferees include \$39,000,000 for Hydrogen Fuel Research and Development and \$7,000,000 for Safety, Codes, and Standards.

#### RENEWABLE ENERGY

*Solar Energy.*—Within available funds, the agreement provides \$72,000,000 for Photovoltaic Research and Development; \$45,000,000 for Systems Integration; \$35,000,000 for Balance of Systems Soft Cost Reduction, of which \$1,000,000 is for the Solar Ready Vets program and \$5,000,000 is to re-invigorate the National Community Solar Partnership program; and \$30,000,000 for Innovations in Manufacturing Competitiveness. Within available funds, \$4,050,000 is provided for the five photovoltaic Regional Test Centers (RTCs). Further, not later than 90 days after the enactment of this Act, the Department shall submit to the Commit-

tees on Appropriations of both Houses of Congress a plan for transitioning the RTCs to a self-sustaining business model as originally envisioned. Within available funds for concentrating solar power research, development, and demonstration, \$5,000,000 is provided for competitively selected projects focused on advanced thermal desalination techniques. Within available funds, the conferees include \$10,000,000 for research and development to support inherently scalable production methods such as solution processing, roll-to-roll manufacturing, the science of inherent material stability, and ultrahigh efficiency through tandem manufacturing.

*Wind Energy.*—Within available funds, the agreement provides \$10,000,000 for distributed wind and not less than \$10,000,000 for existing national-level offshore wind test facilities. The agreement provides not less than \$30,000,000 for the National Wind Technology Center, which shall include the development of a large-scale research platform to support next-generation wind energy science and manufacturing and systems integration of multiple energy generation, consumption, and storage technologies with the grid. The Department is directed to support the advancement of innovative technologies for offshore wind development, including freshwater, deep water, shallow water, and transitional depth installations. Further, the Department is directed to support innovative offshore wind demonstration projects, including efforts to optimize development, design, construction methods, testing plans, and economic value proposition. The agreement provides \$10,000,000 for a competitively awarded solicitation for additional project development for offshore wind demonstration projects. The Department is also directed to support the deployment and testing of scale floating wind turbines designed to reduce energy costs. Within available funds, the agreement provides not less than \$30,000,000 for the Department to prioritize early-stage research on materials and manufacturing methods and advanced components that will enable accessing high-quality wind resources, on development that will enable these technologies to compete in the marketplace without the need for subsidies, and on activities that will accelerate fundamental offshore-specific research and development, such as those that target technology and deployment challenges unique to U.S. waters.

*Water Power.*—Within available funds, the agreement provides \$70,000,000 for marine and hydrokinetic technology research, development, and deployment activities, including research into mitigation of marine ecosystem impacts of these technologies. The Department is directed to continue development of the open-water wave energy test facility with previously provided funds. Within available funds, the agreement provides \$30,000,000 for a balanced portfolio of competitive solicitations to support industry- and university-led research, development, and deployment of marine and hydrokinetic technologies; and support wave, ocean current, tidal and in-river energy conversion components and systems across the high- and low-technology readiness spectrum to increase energy capture, reliability, survivability, and integration into local or regional grids for lower costs and to assess and monitor environmental effects. Within this amount, the agreement provides not less than \$8,000,000 to support collaborations between universities,

Marine Renewable Energy Centers, and the national laboratories and not less than \$5,000,000 to prioritize infrastructure needs at the marine and hydrokinetic technology testing sites operated by the Marine Renewable Energy Centers. In addition, the Department is directed to continue its coordination with the U.S. Navy on marine energy technology development for national security applications at the Wave Energy Test Site and other locations.

Within available funds, \$35,000,000 is provided for conventional hydropower and pumped storage activities, including \$6,600,000 for the purposes of section 242 of the Energy Policy Act of 2005. The agreement provides \$5,000,000 for a competitive funding opportunity for industry-led research, development, and deployment of cross-cutting energy converter technologies for run-of-river and tailrace applications to better utilize underdeveloped low-head and other hydropower resources.

*Geothermal Technologies.*—Within available funds, the agreement provides \$6,000,000 for Systems Analysis. The Department is directed to continue its efforts to identify prospective geothermal resources in areas with no obvious surface expressions.

#### ENERGY EFFICIENCY

*Advanced Manufacturing.*—The agreement provides not less than \$4,205,000 for improvements in the steel industry; \$20,000,000 for process-informed science, design, and engineering of materials and devices operating in harsh environments; \$5,000,000 for research into the materials and manufacturing process development of high-strength, light-weight nano-crystalline metal alloys; and \$5,000,000 for process-informed catalyst science to direct chemical reactions in full-scale industrial manufacturing processes and to develop new industrial product applications. Within available funds, \$132,000,000 is for Advanced Manufacturing Research and Development Facilities, of which \$42,000,000 is for three Clean Energy Manufacturing Innovation (CEMI) Institutes, \$25,000,000 is for the Manufacturing Demonstration Facility (MDF) and Carbon Fiber Technology Facility, \$20,000,000 is for the Energy-Water Desalination Hub, and \$25,000,000 is for the Critical Materials Hub. Within funds for the MDF, \$5,000,000 is for the development of additive systems and automation technologies that have the potential to deposit multiple materials allowing for hybrid material solutions that enhance performance in extreme environments and enable precise property profiles. The Department is directed to further foster the partnership between the national laboratories, universities, and industry to use bio-based thermoplastics composites, such as micro- and nano-cellulosic materials, and large-area 3-D printing to overcome challenges to the cost and deployment of building, transportation, and energy technologies.

Within available funds, the agreement includes \$20,000,000 to support the development of additive manufacturing involving nano-cellulosic feedstock materials made from forest products to overcome challenges to the cost and deployment of building, transportation, and energy technologies. The agreement also includes \$20,000,000 for a competitive solicitation to accelerate development of manufacturing processes needed for clean energy materials to go from discovery to scale-up with the goal of lowering battery energy

storage costs and spurring job creation. The conferees include \$10,000,000 for district heating and directs the Department to collaborate with industry on the potential energy efficiency and energy security gains to be realized with district energy systems. The conferees also include \$10,000,000 to support research and development efforts to improve the efficiency of drying processes.

*Building Technologies.*—The agreement provides \$28,000,000 for Residential Buildings Integration, \$39,000,000 for Commercial Buildings Integration, \$95,000,000 for Emerging Technologies, and \$50,000,000 for Equipment and Buildings Standards. Within available funds, \$7,000,000 is for the Building Energy Codes program to provide assistance to States and to organizations that develop model codes and standards to improve building resilience as well as efficiency.

Within funds for Emerging Technologies, not less than \$18,000,000 is for HVAC & Refrigeration R&D; \$14,000,000 is for Building Envelope; and \$30,000,000 is for building-grid integration R&D consistent with a transactive energy system, including development of advanced transactive control methodologies, field validation and testing in existing buildings, continuation of the Building-to-Grid Integration Demonstration, and coordination with Electricity Delivery transactive energy system activities. Within available funds for transactive controls, \$5,000,000 is to continue promoting regional demonstrations of new, utility-led, residential Connected Communities advancing smart grid systems. The agreement also provides \$20,000,000, within available funds, for research, development, and market transformation programs on energy efficiency efforts related to the direct use of natural gas in residential applications, including gas heat pump heating and water heating, on-site combined heat and power, and natural gas appliance venting. In addition, the conferees include \$5,000,000 for novel earlier-stage research, development, and demonstration of technologies to advance energy efficient, high-rise Cross-Laminated Timber building systems. The Department is directed to support university research, in partnership with the national laboratories, for developing, building, and evaluating Cross-Laminated Timber wall systems for embodied energy content, operating energy efficiency, wall moisture profiles, structural connector durability, and health monitoring sensors. The agreement provides \$2,500,000 for the Solar Decathlon.

*Weatherization and Intergovernmental Programs.*—The Department is directed to make \$500,000 available to current Weatherization Assistance Program grant recipients via the Weatherization Innovation Pilot Program to develop and implement strategies to treat harmful substances, including vermiculite. The Department is directed to provide a briefing to the Committees on Appropriations of both Houses of Congress on the kinds of information that is collected from grantees and the potential for collecting additional information that discusses the kinds of structural deficiencies that make homes ineligible for the program. The Department is also directed to begin tracking the occurrence of window replacements, which supports the reduction of lead-based paint hazards in homes.

*Strategic Programs.*—Within available funds, \$2,500,000 is for the Energy Transition Initiative to support ongoing initiatives to

address high energy costs, reliability, and inadequate infrastructure challenges faced by island and remote communities. The Department is directed to support initiatives for building cost-effective, resilient energy infrastructure on island and remote communities, including in Alaska, the Caribbean, Hawaii, New England, and elsewhere.

#### CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE

The conferees provide \$120,000,000 for Cybersecurity, Energy Security, and Emergency Response.

Within available funds, \$10,000,000 is for research and development on concepts to simplify and isolate automated systems and remove vulnerabilities that could allow unauthorized access to the grid through digital software systems and \$10,000,000 is for the DarkNet project to explore opportunities for getting the nation's critical infrastructure off the Internet and shielding the nation's electricity infrastructure from disruptive cyber penetration.

#### ELECTRICITY DELIVERY

The conferees provide \$156,000,000 for Electricity Delivery.

Within Resilient Distribution Systems, the agreement provides \$7,000,000 for university-based research and development of sensing, intelligent machines in the Internet of Things and their integration in the utility grid and \$5,000,000 to develop high fidelity sensors and use data analytics to improve operations in steady-state and under extreme conditions, and to continue early-stage research to develop low-cost, printable sensors that can predict the health of critical equipment in the electric delivery system.

Within Energy Storage, the Department is directed to continue to support development of an operational energy storage test facility capable of performance-driven data in a utility environment. The Department's storage research, development, and deployment efforts shall support nationwide efforts to improve grid resiliency, reliability, and security, empower consumers, and increase integration of a broad range of generation sources.

Within Transformer Resilience and Advanced Components, the Department is directed to continue to support research and development for advanced components and grid materials for low-cost, power flow control devices, including both solid state and hybrid concepts that use power electronics to control electromagnetic devices and enable improved controllability, flexibility, and resiliency.

The Department is directed to provide to the Committees on Appropriations of both Houses of Congress not later than 90 days after the enactment of this Act a report describing the activities and costs necessary to achieve a North American grid model. Within available funds, the Department may build upon existing tools and modeling work done at the Department to explore a shared modeling platform across the national laboratories. The Department is directed to provide to the Committees on Appropriations of both Houses of Congress not later than 180 days after the enactment of this Act a report on the potential of dynamic line rating systems to address transmission congestion management and improve grid reliability and resiliency.

## NUCLEAR ENERGY

The conferees provide \$1,326,090,000 for Nuclear Energy.

*Nuclear Energy Enabling Technologies.*—Within available funds for Crosscutting Technology Development, \$10,000,000 is for work on advanced sensors and instrumentation and \$10,000,000 is for hybrid energy systems. The agreement provides \$44,000,000 for the Nuclear Science User Facilities, of which \$8,000,000 is for nuclear energy computation system and support; \$31,000,000 for Nuclear Energy Advanced Modeling and Simulation, of which \$3,000,000 is for MW-scale reactor modeling and simulation; and \$27,585,000 for the Energy Innovation Hub for Modeling and Simulation.

*Reactor Concepts Research and Development.*—Within available funds, \$100,000,000 is for Advanced Small Modular Reactor Research and Development to support technical, first-of-its-kind engineering and design and regulatory development of next generation light water and non-light water small modular reactors, including \$10,000,000 for seismic analysis; \$111,500,000 is for Advanced Reactor Technologies, of which \$34,000,000 is for fuel and graphite qualification; \$22,000,000 is to complete the federal share of the two performance-based advanced reactor concepts; and \$20,000,000 is for MW-scale reactor research and development. Within available funds, the agreement provides \$30,000,000 for the Transformational Challenge Reactor to apply existing program capabilities to shape a new approach to reactor design, manufacturing, licensing, and operation. Not later than 90 days after the enactment of this Act, the Department shall provide to the Committees on Appropriations of both Houses of Congress a report that describes the cost and schedule profile for achieving demonstration, key technical challenges, and planned coordination with industry and the national laboratories. The agreement provides \$65,000,000 for research and development to support efforts to develop a versatile fast test reactor. The conferees include \$47,000,000 for the Light Water Reactor Sustainability program. Funding above the budget request is provided for this activity as a priority.

*Fuel Cycle Research and Development.*—The agreement provides \$125,000,000 for the Advanced Fuels program and \$38,000,000 for Material Recovery and Waste Form Development, of which \$7,000,000 is for joint fuel cycle studies and up to \$20,000,000 is for highly enriched uranium recovery preparation and testing to support needs for high assay low enriched uranium. The Department is directed to provide to the Committees on Appropriations of both Houses of Congress not later than 180 days after the enactment of this Act a report describing a plan and cost profile for developing high assay low enriched uranium.

The agreement provides \$63,915,000 for Used Nuclear Fuel Disposition R&D. In lieu of Senate report direction, the agreement includes \$22,500,000 for Integrated Waste Management System activities and no further direction.

*Radiological Facilities Management.*—The agreement includes \$20,000,000 for continued safe operation and maintenance of Oak Ridge National Laboratory hot cells.

*Idaho Facilities Management.*—The agreement provides \$288,000,000 for INL Operations and Infrastructure to support the MFC and ATR Five Year Plan to increase reliability and sustainability.

*Idaho Sitewide Safeguards and Security.*—Within available funds, the agreement includes \$10,000,000 to construct a protective forces building at the ATR complex that will meet the needs for expanded protective force and security operations under the Department's new Design Basis Threat but that will not exceed a total project cost of \$10,000,000.

#### FOSSIL ENERGY RESEARCH AND DEVELOPMENT

The conferees provide \$740,000,000 for Fossil Energy Research and Development.

The agreement does not support the closure of any National Energy Technology Laboratory (NETL) sites and provides no funds to plan, develop, implement, or pursue the consolidation or closure of any of the NETL sites. The agreement includes funding for the Department's National Carbon Capture Center consistent with the cooperative agreement and fiscal year 2018.

*Coal Carbon Capture and Storage (CCS) and Power Systems.*—The Department is directed to use funds from Coal CCS and Power Systems for both coal and natural gas research and development as it determines to be merited, as long as such research does not occur at the expense of coal research and development. The agreement includes \$25,000,000 to continue to support the solicitation for two large-scale pilots that focus on transformational coal technologies that represent a new way to convert energy to enable a step change in performance, efficiency, and the cost of electricity compared to today's technologies. Such technologies include thermodynamic improvements in energy conversion and heat transfer, such as pressurized oxygen combustion and chemical looping, and improvements in carbon capture systems technology. In making the awards for large-scale pilots, the Department should prioritize entities that have previously received funding for these technologies at the lab and bench scale. The agreement provides \$2,000,000 for Hybrid Carbon Conversion activities. Within available funds, the agreement provides not less than \$30,000,000 for a new solicitation for Front-End Engineering and Design (FEED) studies of two commercial-scale carbon capture power projects for retrofit at an existing coal plant and for a coal or natural gas plant that generates carbon dioxide suitable for utilization or storage. A FEED study shall incorporate work from feasibility studies and testing to provide specific project definition, detailed design, scopes of work, material purchasing and construction schedules, cost for project execution, and subsurface, structural, and environmental permitting requirements.

The Department is directed to continue to carry out external activities for advanced coal processing research and development, including advancing early-stage research for converting coal pitch and coal to carbon fiber and other value-added products for alternative uses of coal.

Within Carbon Storage, the agreement provides \$12,000,000 for Carbon Use and Reuse to continue research and development



activities to support valuable and innovative uses for carbon and \$55,000,000 for Storage Infrastructure. The Department is directed to fulfill prior commitments to the Regional Carbon Sequestration Partnerships (RCSPs). In lieu of Senate report direction, the agreement provides not less than \$20,000,000 for a competitive solicitation to fulfill the goals of the RCSPs and not less than \$30,000,000 to continue the four-phase CarbonSAFE initiative. The Department is directed to work collaboratively with the RCSPs and other stakeholders to develop a storage roadmap through 2025 to identify the knowledge gaps and technology and policy developments that are needed to close those gaps.

Within Advanced Energy Systems, the agreement provides \$30,000,000 for Solid Oxide Fuel Cells. Within available funds for Advanced Energy Systems, the agreement provides \$37,000,000 for transformative power generation to improve the efficiency, reliability, and flexible operations of both new and existing plants. The Department is directed to focus on advanced coal technologies that are applicable to retrofit technologies and modular coal technologies that are capable of distributed generation, represent maximum efficiency improvements over the current average fleet, incorporate advanced emissions control systems, and are economically competitive.

Within Cross Cutting Research, the agreement provides \$20,000,000 for the Advanced Ultrasupercritical Program.

Within NETL Coal Research and Development, the agreement provides \$18,000,000 for the Department to continue its external agency activities to develop and test advanced separation technologies and accelerate the advancement of commercially viable technologies for the recovery of rare earth elements and minerals from U.S. coal and coal byproduct sources. The Department is expected to support pilot-scale and experimental activities for near-term applications.

Within Supercritical Transformational Electric Power (STEP) Generation, the agreement provides \$16,700,000 to complete the necessary design and construction of the 10-MW pilot facility, and conduct the necessary testing, including long-duration testing for the facility. The agreement also includes an additional \$5,730,000 for competitively-awarded research and development activities, coordinated with EERE and NE, to advance the use of supercritical power cycles.

*Natural Gas Technologies.*—The agreement provides \$5,200,000 to continue the Risk Based Data Management System (RBDMS) to support a cloud-based application and necessary cybersecurity initiatives. Funding shall support the continued integration of FracFocus and RBDMS for improved public access to State oil and gas related data, as well as for State regulatory agencies to support electronic permitting for operators, eForms for improved processing time for new permits, operator training from the improved FracFocus 3.2 after enhancements are implemented, and miscellaneous reports such as “Produced Water Report: Current and Future Beneficial Uses Report”.

The agreement provides \$20,000,000 for Methane Hydrate Activities, \$10,000,000 for Environmentally Prudent Development, \$10,000,000 for Emissions Mitigation from Midstream Infrastruc-

ture, and \$5,000,000 for Emissions Quantification from Natural Gas Infrastructure.

Within available funds, the Department shall deliver to the Committees on Appropriations of both Houses of Congress a study on the potential for natural gas demand response across energy sectors and geographic regions no later than 18 months after the date of enactment of this Act. This study shall include a description and quantification of potential natural gas and energy savings and load shifting; the costs and benefits associated with those savings, including avoided energy costs, reduced market price volatility, improved electric and gas system reliability, deferred or avoided pipeline or utility capital investment, and air emissions reductions; an identification of geographic areas that would benefit most from implementing demand response measures for natural gas infrastructure; and a description of existing and emerging technologies that can be used for demand response in the natural gas sector, as well as best practices for developing a strategy for deployment of those technologies in the natural gas sector.

*Unconventional Technologies.*—Within available funds, the agreement provides \$13,500,000 for research to better understand reservoirs and to improve low recovery factors from unconventional natural gas and oil wells and \$13,500,000 for continued research toward enhanced recovery technologies in shale oil, low permeability reservoirs, residual oil zone reservoirs, fractured reservoirs, and conventional oil reservoirs. The Department shall solicit, award and manage these research projects on a nationwide basis directly with researchers from universities and not-for-profit research organizations. The projects may include research projects to improve environmental mitigation, water quality and treatment, infrastructure technology, as well as the societal impacts of unconventional shale plays. These awards shall identify ways to improve existing technologies, encourage prudent development, provide cost-effective solutions, and develop a better understanding of these reservoirs' resource potential. The agreement includes not less than \$15,000,000 for the Unconventional Field Test Sites. When issuing funding for research into the exploration for and development of emerging unconventional oil and gas reservoirs, the Department shall direct future allocations to projects in locations geologically representative of the unconventional reservoir of interest. The agreement provides not less than \$2,500,000 for further research on multipronged approaches for characterizing the constituents of and managing the cleaning of water produced during the extraction of oil and natural gas. Within available funds, the Department is directed to partner with research universities engaged in the study of characterizing, cleaning, treating, and managing produced water and who are willing to engage through public-private partnerships with the energy industry to develop and assess commercially viable technology to achieve the same.

The Department is directed to identify the federal agencies with jurisdictional oversight of establishing an ethane storage and distribution hub in central Appalachia and to coordinate with the liaisons of those agencies to streamline the permitting application and approval process. The Department is directed to brief the Com-

mittees on Appropriations of both Houses of Congress on its findings and recommendations once complete.

The Department is directed to continue its research partnership with the Department of Transportation on the crude oil characterization study to improve the safety of crude oil transported by rail. The agreement provides \$1,500,000 to continue this study.

#### NAVAL PETROLEUM AND OIL SHALE RESERVES

The agreement provides \$10,000,000 for the operation of the Naval Petroleum and Oil Shale Reserves.

#### STRATEGIC PETROLEUM RESERVE

The agreement provides \$235,000,000 for the Strategic Petroleum Reserve. Funding above the budget request is to address facilities development and operations, including physical security and cavern integrity, and to maintain 1,000,000 barrels of gasoline blendstock in the Northeast Gasoline Supply Reserve. The agreement includes legislative language regarding a drawdown and sale of oil and use of proceeds in fiscal year 2019.

#### SPR PETROLEUM ACCOUNT

The agreement provides \$10,000,000 for the SPR Petroleum Account to pay for the costs of certain statutorily-mandated crude oil sales.

#### NORTHEAST HOME HEATING OIL RESERVE

The agreement provides \$10,000,000 for the Northeast Home Heating Oil Reserve.

#### ENERGY INFORMATION ADMINISTRATION

The conferees provide \$125,000,000 for the Energy Information Administration.

#### NON-DEFENSE ENVIRONMENTAL CLEANUP

The conferees provide \$310,000,000 for Non-Defense Environmental Cleanup.

*Small Sites.*—Within amounts for Small Sites cleanup, \$35,000,000 shall be for Lawrence Berkeley National Laboratory, \$10,000,000 shall be for Oak Ridge activities, \$45,000,000 shall be for Moab, \$20,456,000 shall be for Brookhaven National Laboratory to continue removal of the High Flux Beam Reactor stack, and no further direction. If any of the funding for Brookhaven is in excess of needs such sums shall be applied to other Small Site cleanup activities.

#### URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND

The conferees provide \$841,129,000 for activities funded from the Uranium Enrichment Decontamination and Decommissioning Fund.

*Portsmouth.*—The conferees includes \$60,000,000 above the budget request for Portsmouth cleanup, which is equivalent to the amount of proceeds that the Department planned to generate through bartering arrangements in order to fund additional cleanup in fiscal year 2019. The Department shall not barter, transfer, or sell uranium in order to generate additional funding for Portsmouth cleanup that is in excess of the amount of funding provided in this Act.

## SCIENCE

The conferees provide \$6,585,000,000 for the Office of Science.

The agreement provides \$4,000,000, to be funded from across all Office of Science programs, to support the Distinguished Scientist Program, as authorized in section 5011 of Public Law 110-69. The Department is directed to provide to the Committees on Appropriations of both Houses of Congress not later than 90 days after the enactment of this Act a plan that responds to the recommendations of the National Academies study “Opportunities in Intense Ultrafast Lasers, Towards the Brightest Light”.

*Advanced Scientific Computing Research.*—Within available funds, the agreement provides \$140,000,000 for the Argonne Leadership Computing Facility, \$200,000,000 for the Oak Ridge Leadership Computing Facility, \$105,000,000 for the National Energy Research Scientific Computing Center at Lawrence Berkeley National Laboratory, \$10,000,000 for the Computational Sciences Graduate Fellowship program, and \$85,000,000 for ESnet. The agreement provides \$75,667,000 for Computational Partnerships (SciDAC). Within funds for SciDAC, up to \$13,000,000 is to support work on artificial intelligence and big data focused on the development of algorithms and methods to identify new ways of extracting information from data generated at the Office of Science’s large user facilities or validating use of machine learning in the Office of Science’s program’s scientific simulations. This is the only funding recommended within the Office of Science that shall be available for this work. Further, none of the funding is available for clinical trials or therapeutics. The Department is directed to provide to the Committees on Appropriations of both Houses of Congress not later than 90 days after the enactment of this Act a briefing on its plan for implementing this artificial intelligence and big data initiative.

*Basic Energy Sciences (BES).*—The agreement provides not less than \$135,000,000 for the Nanoscale Science Research Centers. The agreement includes not less than \$505,000,000 for facilities operations at the five BES light sources to adequately invest in the recapitalization of key instruments and infrastructure, and in staff and other resources necessary to deliver critical scientific capabilities to users, and no further direction. The Department is directed to submit as part of its fiscal year 2020 budget submission a plan for the buildout of additional beamlines to fully leverage the capabilities of the NSLS-II. The Department is directed to resume annual or at minimum, biennial, Implementation Grant solicitations for EPSCoR. In addition, the Department is directed to submit to the Committees on Appropriations of both Houses of Congress not later than 90 days after the enactment of this Act a report that provides a plan for future EPSCoR solicitations. The agreement

provides \$282,000,000 for the high-flux neutron sources which will allow for both Spallation Neutron Source and High Flux Isotope Reactor to proceed with the most critical deferred repairs, replace outdated instruments, and make essential machine improvements. The agreement provides not less than \$19,100,000 for Other Project Costs, of which \$6,000,000 is for the High Energy Upgrade at LCLS-II, \$6,100,000 is for LCLS-II, \$2,000,000 is for the Advanced Light Source Upgrade, and \$5,000,000 is for the Second Target Station. The Department is directed to proceed with the upgrade of existing user facilities and major construction projects for new user facilities in a manner consistent with the June 2016 BESAC recommendations and subsequent Departmental reviews and findings related to these projects. Further, the Department is directed to follow the Department of Energy Order 413.3B project management reporting requirements for these projects and provide project data sheets for those projects in the budget submission. Within available funds, the agreement provides \$26,000,000 for exascale systems. The Department is directed to continue its partnership with qualified institutions of higher education in support of energy research activities related to enhanced efficiency in energy conversion and utilization, including emergent polymer optoelectronic technologies.

*Biological and Environmental Research (BER).*—The following is the only direction provided for BER. The Department is directed to give priority to optimizing the operation of BER user facilities. In addition, the Department is directed to maintain Genomic Science as a top priority. Within available funds, the agreement provides \$100,000,000 for the four Bioenergy Research Centers, \$90,000,000 for Foundational Genomics Research, \$34,908,000 for Biomolecular Characterization and Imaging Science, and \$70,000,000 for the Joint Genome Institute. Within available funds, \$10,000,000 is to begin the establishment of a national microbiome database.

Within available funds, not less than \$40,000,000 is for Terrestrial Ecosystem Science, of which not less than \$10,000,000 is for NGEE-Arctic, \$5,800,000 is for NGEE-Tropics, \$8,300,000 is for the SPRUCE field site, \$6,800,000 is for the Watershed Function Science Focus Area, and \$5,700,000 is for Ameriflux Long-Term Earth Systems Observations. Within available funds, not less than \$22,143,000 is for Subsurface Biogeochemical Research, including not less than \$3,000,000 to support ongoing research and discovery related to mercury biogeochemical transformations in the environment. Within available funds, the agreement provides \$97,000,000 for Earth and Environmental Systems Modeling. The Department is directed to expend funds for earth system modeling, and regional and global analysis. Further, the Department is directed to make land-energy interactions, land biogeochemistry, uncertainty quantification, and model evaluation a priority within the regional and global modeling activities and continue to support performance optimization of coupled systems for execution on high performance and exascale systems. The agreement provides \$15,000,000 for exascale computing. The agreement provides \$45,000,000 for the Environmental Molecular Sciences Laboratory, \$68,000,000 for the Atmospheric Radiation Measurement (ARM) User Facility, and \$17,500,000 to replace the ARM mobile unit.

*Fusion Energy Sciences (FES).*—The following is the only direction for FES. The agreement provides \$286,704,000 for burning plasma science foundations, \$61,246,000 for burning plasma science long pulse, and \$84,050,000 for discovery plasma science. Within available funds, the agreement provides \$18,000,000 for High Energy Density Laboratory Plasmas and \$25,000,000 for Scientific Discovery through Advanced Computing. Within available funds, the agreement includes \$5,000,000 to provide upgrades to the Safety and Tritium Applied Research Facility and not less than \$7,000,000 for the Materials Plasma Exposure eXperiment. The agreement provides \$132,000,000 for the U.S. contribution to the ITER project and no further direction. The Fusion Energy Sciences Advisory Committee is directed to work with the Office of Nuclear Energy to review establishing a reactor concepts research, development, and deployment activity. The Department is directed to provide to the Committees on Appropriations of both Houses of Congress not later than 180 days after the enactment of this Act a briefing on a recommendation, which if supported, will include a technical plan, program and eligibility requirements, and funding profile for future fiscal years.

*High Energy Physics.*—Within available funds, the agreement provides \$15,000,000 for PIP-II; \$6,250,000 for ongoing efforts for commissioning and initial operation of the camera for the Large Synoptic Survey Telescope Camera; \$10,000,000 to continue the upgrade of FACET II; \$105,000,000 for the HL-LHC Upgrade Projects; and \$22,450,000 to complete the dark energy and dark matter experiments, of which \$5,450,000 is for DESI and \$14,450,000 is for LUX ZEPLIN.

*Nuclear Physics.*—Within available funds, the agreement provides \$11,500,000 for the Stable Isotope Production Facility, \$6,600,000 for the Gamma-Ray Energy Tracking Array, and \$5,660,000 for the Super Pioneering High Energy Nuclear Interaction Experiment. The Department is directed to give priority to optimizing the operations for the Relativistic Heavy Ion Collider, the Continuous Electron Beam Accelerator Facility, the Argonne Tandem Linac Accelerator System, and the Brookhaven Linac Isotope Producer Facility.

*Workforce Development.*—Within available funds, the agreement provides \$10,300,000 for the Science Undergraduate Laboratory Internship and \$3,500,000 for the Graduate Student Research Program.

*Science Laboratories Infrastructure.*—The Office of Science is directed to work with the Office of Nuclear Energy to demonstrate a commitment to operations and maintenance of nuclear facilities at Oak Ridge National Laboratory that support multiple critical missions.

#### ADVANCED RESEARCH PROJECTS AGENCY—ENERGY

The conferees provide \$366,000,000 for the Advanced Research Projects Agency—Energy.

The Department is directed to continue to spend funds provided on research and development and program direction. The Department shall not use any appropriated funds to plan or execute the termination of ARPA-E. In addition, the Department is di-

rected to disburse funds appropriated for ARPA-E on eligible projects within a reasonable time period, consistent with past practices.

#### TITLE 17 INNOVATIVE TECHNOLOGY LOAN GUARANTEE PROGRAM

The conferees provide \$33,000,000 for administrative expenses for the Title 17 Innovative Technology Loan Guarantee Program. This amount is offset by estimated revenues of \$15,000,000, resulting in a net appropriation of \$18,000,000. The Department shall not use funds to plan, develop, implement, or pursue the elimination of the Title 17 Innovative Technology Loan Guarantee Program.

#### ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PROGRAM

The conferees provide \$5,000,000 for the Advanced Technology Vehicles Manufacturing Loan Program.

#### TRIBAL ENERGY LOAN GUARANTEE PROGRAM

The conferees provide \$1,000,000 for the Tribal Energy Loan Guarantee Program.

#### OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS

The conferees provide \$18,000,000 for the Office of Indian Energy Policy and Programs.

#### DEPARTMENTAL ADMINISTRATION

The agreement provides \$165,858,000 for Departmental Administration.

*Control Points.*—In lieu of House and Senate direction on control points, the agreement includes six reprogramming control points in this account to provide flexibility in the management of support functions. The Other Departmental Administration activity includes Management, Project Management Oversight and Assessments, Chief Human Capital Officer, Office of Technology Transitions, Office of Small and Disadvantaged Business Utilization, General Counsel, Office of Policy, International Affairs, and Public Affairs. The Department is directed to continue to submit a budget request that proposes a separate funding level for each of these activities. The agreement does not adopt the proposal to transfer staff from the applied energy offices to International Affairs. Within International Affairs, the agreement includes \$2,000,000 for the Israel Binational Industrial Research and Development (BIRD) Foundation and \$4,000,000 for the U.S.–Israel Center of Excellence in Energy, Engineering and Water Technology, which were previously funded in the Energy Efficiency and Renewable Energy account.

*Chief Information Officer.*—To enhance the accountability for management of cyber resources, the agreement consolidates cybersecurity funding under the Office of the Chief Information Officer. The recommendation includes \$131,624,000, including \$96,793,000 as requested within Departmental Administration and \$34,831,000

as requested for CyberOne activities within the DOE working capital fund. Within this amount, not less than \$71,501,000 shall be for cybersecurity and secure information.

*Nuclear Power Plant Closings.*—Prior to the opening of a permanent repository or monitored retrievable storage for spent nuclear fuel, power plant sites serve as de facto storage facilities for this nuclear waste. When a plant closes, onsite storage of spent nuclear fuel can be a factor affecting redevelopment of the location. The Department is directed to submit to the Committees on Appropriations of both Houses of Congress not later than 180 days after the enactment of this Act a study on existing public and private resources and funding for which municipalities where a nuclear power plant is decommissioned, in the process of decommissioning, or plans to shut down within 3 years of enactment of this Act and contains nuclear waste within its boundaries may be eligible.

*Radium Contamination.*—The Department shall review the details of any facility of the Nevada System of Higher Education, as defined by the State of Nevada, that is contaminated with radium to determine whether the Department has a legal liability or authorization for remediation of such facility.

*Energy Technology Commercialization Fund.*—In making awards from the Energy Technology Commercialization Fund established under section 1001(e) of the Energy Policy Act of 2005 (42 U.S.C. 16391(e)), the requirements for matching funds shall be determined by the Secretary of Energy in accordance with section 988 of that Act (42 U.S.C. 16352).

#### OFFICE OF THE INSPECTOR GENERAL

The agreement provides \$51,330,000 for the Office of the Inspector General.

### ATOMIC ENERGY DEFENSE ACTIVITIES

#### NATIONAL NUCLEAR SECURITY ADMINISTRATION

The conferees provide \$15,228,618,000 for the National Nuclear Security Administration (NNSA). The conferees include funding for the NNSA's institutional plant projects in the agreement and direct the NNSA to expedite reports that account for site indirect overhead and administrative costs as directed by the Congress.

The NNSA Act clearly lays out the functions of the NNSA and gives the Administrator authority over, and responsibility for, those functions. While the NNSA may expend funds to study its organizational structure, no funds shall be used to reorganize or reclassify any of those functions specified in the NNSA Act.

#### WEAPONS ACTIVITIES

The conferees provide \$11,100,000,000 for Weapons Activities. The agreement directs the use of \$13,080,000 in unexpended prior-year balances to offset fiscal year 2019 needs.

When proposing new or modified nuclear weapons activities, the Department shall ensure adherence to the requirements of 50 U.S.C. 2529, including requesting a single dedicated line item for



such activities. The NNSA is directed to comply with the direction in the House report regarding the W76-2 Modification Program.

*IW/W78 Life Extension Program.*—In lieu of language in the House report on the W78 Life Extension Program (LEP), the NNSA is directed to provide to the Committees on Appropriations of both Houses of Congress, not later than 60 days after the enactment of this Act and prior to commencement of phase 6.2, a report that provides the rationale for an insensitive-high explosive (IHE)-based system, an updated estimate of the cost and schedule for warhead development and production, and a rough order of magnitude cost and schedule comparison of the differences between the requested IW and a W76 LEP-like refurbishment of the W78. Further, the NNSA shall initiate an independent review by the Office of Cost Estimating and Program Evaluation (CEPE) of the analysis of alternatives process conducted as part of the life extension study of the W78 to assess objectivity, thoroughness, and adherence to the Government Accountability Office recommended best practices, in accordance with current NNSA policy.

Not later than 180 days after the enactment of this Act, the NNSA shall provide to the Committees on Appropriations of both Houses of Congress a report that includes the following: (1) the results of the CEPE review; (2) a cost and schedule estimate to refurbish the W78 warhead in a manner similar to the W76 LEP; (3) a cost estimate for any needed upgrades to Department of Defense facilities to fully satisfy safety requirements for handling conventional high explosives; (4) impacts to the IW/W78 LEP if pit production targets are not met; and (5) the certification strategy for the IW/W78 LEP that addresses issues raised by the JASONS group in its review of certification risks for an IW with IHE and remanufactured pits.

*Domestic Uranium Enrichment.*—In lieu of House or Senate language, the conferees direct the NNSA to ensure that there is a credible plan to complete adequate research, development, and demonstration prior to making a decision on domestic uranium enrichment for national security purposes and to focus efforts on work that will provide information to support that decision. No funds are provided for downblending highly enriched uranium. Funds at the requested level for downblending are included in the Tritium Sustainment account.

*Plutonium Pit Production Project.*—The conferees include \$75,000,000 to commence a new project to meet the NNSA's plutonium pit production targets, of which \$11,000,000 shall be for the subproject to re-categorize the Radiological Laboratory Utility Office Building (RLUOB) to a hazard category-3 facility and \$6,177,000 shall be for the subproject for the second phase of work to reconfigure the PF-4 facility. The NNSA is directed to budget for capital improvements and equipment installations to meet plutonium pit production targets, including the RLUOB re-categorization and the PF-4 phase 2 subprojects, as subprojects within the Plutonium Pit Production Project and to budget for operational expenses to meet plutonium pit production targets within Plutonium Sustainment Operations in future budget requests. Not later than 60 days after the enactment of this Act, the NNSA shall provide to the Committees on Appropriations of both Houses of Congress

a report on the current scope, costs, and schedule required to meet its plutonium mission targets and shall submit a project data sheet for the Plutonium Pit Production Project in its fiscal year 2020 budget submission.

*Science.*—Within amounts for Academic Alliances and Partnerships, \$20,000,000 shall be for the Minority Serving Institution Partnerships Program, within which \$2,000,000 shall be for Tribal Colleges and Universities. The conferees include \$50,000,000 for the Advanced Sources and Detectors Major Item of Equipment (MIE) and supporting research activities. The NNSA is directed to submit a project data sheet for the Advanced Sources and Detectors MIE in its fiscal year 2020 budget request. Funds for high energy density grants are included within the Inertial Confinement Fusion (ICF) and High Yield program.

*Inertial Confinement Fusion and High Yield.*—Within amounts for ICF, \$344,000,000 shall be for the National Ignition Facility, \$80,000,000 shall be for OMEGA, \$63,100,000 shall be for the Z Facility, and \$7,000,000 shall be for the Naval Research Laboratory. Within available amounts, funds are provided for target research, development, and production. Not later than 60 days after the enactment of this Act, the NNSA shall provide to the Committees on Appropriations of both Houses of Congress a report on the impacts to the ICF program of shifting to a full-cost recovery model for the National Ignition Facility. No further direction is provided.

*Advanced Simulation and Computing.*—Within amounts for Advanced Simulation and Computing, \$163,000,000 shall be for the exascale initiative, \$20,000,000 shall be for advanced memory technology research, and \$13,000,000 shall be for work on integrating artificial intelligence approaches into mechanistic modeling and prediction.

*Advanced Manufacturing Development.*—Within amounts provided for Process Technology Development, the agreement includes \$5,000,000 to modernize and upgrade legacy applications at weapons production facilities.

*Infrastructure and Operations.*—The conferees include funding above the budget request within Maintenance and Repair and Recapitalization to address the significant backlog of deferred maintenance at the NNSA's sites. Within amounts for Recapitalization, \$22,500,000 shall be for recapitalization of the MESA silicon fab facility as requested and \$10,000,000 shall be to advance plans for the Tritium Production Capability Project.

*Chemistry and Metallurgy Research (CMR) Building Replacement Project.*—The conferees include the subproject funding requested to re-categorize the RLUOB to a hazard category-3 facility and for the second phase of work to reconfigure the PF-4 facility within the Plutonium Pit Production Project and direct the NNSA to request funds by these subprojects within the Plutonium Pit Production Project in future budget submissions.

## DEFENSE NUCLEAR NONPROLIFERATION

### (INCLUDING RESCISSION OF FUNDS)

The conferees provide \$1,949,000,000 for Defense Nuclear Nonproliferation. The agreement rescinds \$19,000,000 from unex-

pending prior-year balances and directs the use of \$25,000,000 in prior-year balances from nonproliferation construction to offset fiscal year 2019 needs. The agreement includes a provision that directs the use of \$25,000,000 for design activities for the dilute and dispose strategy for plutonium disposition and a provision that prohibits the use of funds for construction and procurement activities for the Surplus Plutonium Disposition project.

*Global Material Security.*—Within amounts for Domestic Radiological Security, the conferees provide \$12,000,000 to improve capabilities to train first responders and other experts in nuclear operations, safeguards, cyber, and emergency response.

*Material Management and Minimization.*—The NNSA shall discontinue requesting funds in this account for HEU Reactor Conversion in its fiscal year 2020 budget request and is directed to request funds for these activities within Laboratory and Partnership Support and Nonproliferation Fuel Development as provided in the conference agreement. Within amounts for Laboratory and Partnership Support, \$15,000,000 shall be for technical support of global and industry partners that are seeking to minimize the use of highly-enriched uranium in the production of Mo-99 and \$20,000,000 shall be to support the competitively-awarded funding opportunity to expedite the establishment of a stable domestic source of Mo-99 that was directed in the fiscal year 2018 Act.

In lieu of language in the House report, the conferees include funding within Material Disposition for design, planning, and other supporting activities for the dilute and dispose strategy for plutonium disposition.

*Nonproliferation and Arms Control.*—In lieu of language in the Senate report, the NNSA shall provide to the Committees on Appropriations of both Houses of Congress, not later than 45 days after the enactment of this Act, a briefing on international efforts to monitor global technology supply chains and implement robust export controls to prevent nuclear proliferation.

*MOX Fuel Fabrication Facility, SRS.*—In lieu of language in the House and Senate reports, the conferees include funds for the project consistent with the amounts and uses authorized by the National Defense Authorization Act for Fiscal Year 2019.

*Defense Nuclear Nonproliferation Research and Development (DNN R&D).*—Within amounts for Nonproliferation Fuels Development, \$10,000,000 shall be for the national laboratories to develop high-density low-enriched fuels that could replace highly enriched uranium for naval applications.

In lieu of the prohibition on the use of funds to convert the Advanced Test Reactor (ATR) and the High Flux Isotope Research Reactor (HFIR) in the House report, the NNSA shall provide to the Committees on Appropriations of both Houses of Congress not later than 90 days after the enactment of this Act a report on the total estimated costs to convert ATR, HFIR, TREAT, and any other reactor currently planned for conversion through the U.S. High Performance Research Reactor Program. The report shall include a multi-year funding plan and schedule through completion for each separate reactor conversion and the estimates shall include sufficient contingency to account for any remaining programmatic and technical risks associated with the fuel development activities.

## NAVAL REACTORS

(INCLUDING TRANSFER OF FUNDS)

The conferees provide \$1,788,618,000 for Naval Reactors. The agreement includes a provision to transfer \$85,500,000 to Nuclear Energy for operations and maintenance of the Advanced Test Reactor. Within funds for Naval Reactors Research and Development, \$2,000,000 is for planning, preparation, and shipments of nuclear materials to support a pilot project on ZIRCEX.

## FEDERAL SALARIES AND EXPENSES

The conferees provide \$410,000,000 for the federal salaries and expenses of the Office of the NNSA Administrator.

## ENVIRONMENTAL AND OTHER DEFENSE ACTIVITIES

## DEFENSE ENVIRONMENTAL CLEANUP

(INCLUDING RESCISSION OF FUNDS)

The conferees provide \$6,028,600,000 for Defense Environmental Cleanup. The conferees include a rescission of \$4,600,000 in unexpended prior-year balances from the Hexavalent Chromium Pump and Treatment Facility project and direct the use of \$7,577,000 in prior-year balances from the Savannah River Site to offset fiscal year 2019 needs. The Department is directed to submit its fiscal year 2020 budget request consistent with the budget structure for the Waste Treatment Plant in this Act.

In lieu of the direction in the House and Senate reports, no funds are provided within the Richland or Office of River Protection control points for the Test Bed Initiative, consistent with the budget request. Not later than 60 days after the enactment of this Act, the Department shall submit to the Committees on Appropriations of both Houses of Congress a report on the Test Bed Initiative that includes expected costs and implementation schedule, impacts on the 2016 Consent Decree and Tri-Party Agreement, any necessary regulatory or permit changes, any necessary National Environmental Policy Act analysis, any necessary changes on site infrastructure, and plans for storage and disposal of waste generated through this initiative. If the Department requests funds for the Initiative in future budget submissions, such funds shall be requested within the Office of River Protection in a new, separate control point.

*Richland.*—Within amounts for Richland, the conferees include \$2,000,000 above the budget request for maintenance and repair of B Reactor and additional amounts above the budget request for cleanup of the 324 Building, Plutonium Finishing Plant, and K-West facility; interim stabilization of PUREX Tunnel #2; and site-wide infrastructure. Also within amounts for Richland, no funding shall be available to carry out activities relating to single-shell tank stabilization or tank farm activities outside of site-wide infrastructure activities. Within amounts for Central Plateau Remediation, \$8,500,000 shall be for the Hazardous Materials Management and Emergency Response facilities.

*Technology Development and Deployment.*—Within the amounts provided for Technology Development and Deployment, not less than \$5,000,000 shall be for work on qualification, testing, and research to advance the state of the art of containment ventilation systems and the Department shall take the necessary steps to implement and competitively award a cooperative university affiliated research center for that purpose; \$5,000,000 shall be for the National Spent Fuel Program at Idaho National Laboratory to address activities recommended by the Nuclear Waste Technical Review Board as directed in the House report; \$5,000,000 shall be for independent review, analysis, and applied research to support cost-effective, risk-informed cleanup decision-making; and no further direction.

#### OTHER DEFENSE ACTIVITIES

The conferees provide \$860,292,000 for Other Defense Activities and include the use of \$2,000,000 in unexpended prior-year balances to offset fiscal year 2019 needs. The agreement includes \$12,000,000 above the budget request for targeted investments to defend the U.S. energy sector against the evolving threat of cyber and other attacks in support of the resiliency of the nation's electric grid and energy infrastructure.

The conferees are concerned with the recently issued Order 140.1, Interface with the Defense Nuclear Facilities Safety Board (DNFSB), and the potential impacts on the ability of the DNFSB to carry out its Congressionally-mandated responsibilities. Not later than 30 days after the enactment of this Act, the Department shall provide to the Committees on Appropriations of both Houses of Congress a briefing on how the Order differs from the previous Manual, how the Department plans to incorporate concerns from the DNFSB and the public, and the Department's plans to implement the Order across the organization.

#### POWER MARKETING ADMINISTRATIONS

No funds are recommended to divest transmission assets of the Power Marketing Administrations (PMA). The conferees remind the Department of the prohibition on studying transfer of PMA assets in Public Law 99-349.

*Organizational Reporting.*—The Department recently announced a change in organizational structure moving the point of reporting for the PMAs to the Assistant Secretary for Electricity from the Deputy Secretary. The Committee has heard concerns that the realignment may indicate an intention to change the substantive relationship between the Department and each PMA, including actions related to PMA leadership decisions, use of the PMAs and their resources, and ratemaking; the Committee does not support such a change. The PMAs have unique statutory requirements, and the Committee expects the Department to adhere to and not expand upon those requirements.

## BONNEVILLE POWER ADMINISTRATION FUND

The agreement provides no appropriation for the Bonneville Power Administration, which derives its funding from revenues deposited into the Bonneville Power Administration Fund.

OPERATION AND MAINTENANCE, SOUTHEASTERN POWER  
ADMINISTRATION

The agreement provides a net appropriation of \$0 for the Southeastern Power Administration.

OPERATION AND MAINTENANCE, SOUTHWESTERN POWER  
ADMINISTRATION

The agreement provides a net appropriation of \$10,400,000 for the Southwestern Power Administration. To ensure sufficient authority to meet purchase power and wheeling needs, the agreement includes \$40,000,000 above the level credited as offsetting collections by the Congressional Budget Office. The Department is directed to continue working with the Committees on Appropriations of both Houses of Congress to provide necessary information to address this scoring issue for future fiscal years.

CONSTRUCTION, REHABILITATION, OPERATION AND MAINTENANCE,  
WESTERN AREA POWER ADMINISTRATION

The agreement provides a net appropriation of \$89,372,000 for the Western Area Power Administration. To ensure sufficient authority to meet purchase power and wheeling needs, the agreement includes \$45,442,000 above the level credited as offsetting collections by the Congressional Budget Office. The Department is directed to continue working with the Committees on Appropriations of both Houses of Congress to provide necessary information to address this scoring issue for future fiscal years.

## FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND

The agreement provides a net appropriation of \$228,000 for the Falcon and Amistad Operating and Maintenance Fund. The agreement includes the use of \$2,500,000 in prior-year balances. The agreement includes legislative language authorizing the acceptance and use of contributed funds in fiscal year 2019 for operating, maintaining, repairing, rehabilitating, replacing, or upgrading the hydroelectric facilities at the Falcon and Amistad Dams.

Concerns persist that additional infrastructure investments are necessary at the Falcon and Amistad dams. Western is directed to coordinate with the International Boundary and Water Commission to determine a plan for addressing any needed improvements and brief the Committees on Appropriations of both Houses of Congress not later than 90 days after the enactment of this Act on progress towards finalizing a plan.

## FEDERAL ENERGY REGULATORY COMMISSION

## SALARIES AND EXPENSES

The agreement provides \$369,900,000 for the Federal Energy Regulatory Commission (FERC). Revenues for FERC are set to an amount equal to the budget authority, resulting in a net appropriation of \$0.

FERC shall require the licensee of Oroville Dam to request the United States Society on Dams to nominate independent consultants to prepare a level 2 risk analysis, consistent with the Commission's guidelines, for use in conducting the next Part 12 safety review of Oroville Dam, currently scheduled for 2019. FERC shall ensure the independence of the nominated consultants from the licensee.

## GENERAL PROVISIONS—DEPARTMENT OF ENERGY

## (INCLUDING TRANSFERS OF FUNDS)

The conferees include a modified provision prohibiting the use of funds provided in this title to initiate requests for proposals, other solicitations, or arrangements for new programs or activities that have not yet been approved and funded by the Congress; requires notification or a report for certain funding actions; prohibits funds to be used for certain multi-year "Energy Programs" activities without notification; and prohibits the obligation or expenditure of funds provided in this title through a reprogramming of funds except in certain circumstances.

The conferees include a provision authorizing intelligence activities of the Department of Energy for purposes of section 504 of the National Security Act of 1947.

The conferees include a provision prohibiting the use of funds in this title for capital construction of high hazard nuclear facilities, unless certain independent oversight is conducted.

The conferees include a provision prohibiting the use of funds in this title to approve critical decision-2 or critical decision-3 for certain construction projects, unless a separate independent cost estimate has been developed for that critical decision.

The conferees include a provision on the Department of Energy's Working Capital Fund.

The conferees include a provision prohibiting funds in the Defense Nuclear Nonproliferation account for certain activities and assistance in the Russian Federation.

The conferees include a provision regarding management of the Strategic Petroleum Reserve.

The conferees include a provision regarding authority to release refined petroleum product from the Strategic Petroleum Reserve.

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
ENERGY PROGRAMS			
ENERGY EFFICIENCY AND RENEWABLE ENERGY			
Sustainable Transportation:			
Vehicle technologies.....	337,500	68,500	344,000
Bioenergy technologies.....	221,545	37,000	226,000
Hydrogen and fuel cell technologies.....	115,000	58,000	120,000
Subtotal, Sustainable Transportation.....	674,045	163,500	690,000
Renewable Energy:			
Solar energy.....	241,600	67,000	246,500
Wind energy.....	92,000	33,000	92,000
Water power.....	105,000	45,000	105,000
Geothermal technologies.....	80,906	30,000	84,000
Subtotal, Renewable Energy.....	519,506	175,000	527,500
Energy Efficiency:			
Advanced manufacturing.....	305,000	75,000	320,000
Building technologies.....	220,727	57,000	226,000
Federal energy management program.....	27,000	10,000	30,000
Weatherization and Intergovernmental Programs:			
Weatherization:			
Weatherization assistance program.....	248,000	---	254,000
Training and technical assistance.....	3,000	---	3,000
Subtotal, Weatherization.....	251,000	---	257,000
State Energy Program Grants.....	55,000	---	55,000
Subtotal, Weatherization and Intergovernmental Program.....	306,000	---	312,000
Subtotal, Energy Efficiency.....	858,727	142,000	888,000
Corporate Support:			
Facilities and infrastructure:			
National Renewable Energy Laboratory (NREL).....	92,000	90,000	97,000
Program direction.....	162,500	125,110	162,500
Strategic programs.....	15,000	---	14,000
Subtotal, Corporate Support.....	269,500	215,110	273,500
TOTAL, ENERGY EFFICIENCY AND RENEWABLE ENERGY.....	2,321,778	695,610	2,379,000
ELECTRICITY DELIVERY AND ENERGY RELIABILITY			
Research and development:			
Transmission Reliability.....	39,000	---	---
Resilient Distribution Systems.....	38,000	---	---
Cyber security for energy delivery systems.....	75,829	---	---
Energy storage.....	41,000	---	---
Transformer resilience and advanced components.....	7,000	---	---
Subtotal, Research and development.....	200,829	---	---
Transmission Permitting and Technical Assistance.....	7,000	---	---



DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
Infrastructure security and energy restoration.....	12,000	---	---
Program direction.....	28,500	---	---
<b>TOTAL, ELECTRICITY DELIVERY AND ENERGY RELIABILITY</b>	<b>248,329</b>	<b>---</b>	<b>---</b>
<b>CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE</b>			
Cybersecurity for energy delivery systems.....	---	70,000	89,500
Infrastructure security and energy restoration.....	---	18,000	19,000
Program direction.....	---	7,800	11,500
<b>TOTAL, CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE</b>	<b>---</b>	<b>95,800</b>	<b>120,000</b>
<b>ELECTRICITY DELIVERY</b>			
Transmission reliability.....	---	13,000	39,000
Resilient distribution systems.....	---	10,000	40,000
Energy storage.....	---	8,000	46,000
Transformer resilience and advanced components.....	---	5,000	7,000
Transmission permitting and technical assistance.....	---	6,000	7,000
Program direction.....	---	19,309	17,000
<b>TOTAL, ELECTRICITY DELIVERY</b>	<b>---</b>	<b>61,309</b>	<b>156,000</b>
<b>NUCLEAR ENERGY</b>			
<b>Research and development:</b>			
Integrated university program.....	5,000	---	5,000
STEP R&D.....	5,000	---	5,000
Nuclear energy enabling technologies.....	159,000	116,000	152,585
Reactor concepts RD&D.....	237,000	163,000	323,500
Fuel cycle research and development.....	260,056	60,000	263,915
International nuclear energy cooperation.....	3,000	2,500	3,000
<b>Subtotal, Research and development</b>	<b>669,056</b>	<b>341,500</b>	<b>753,000</b>
<b>Infrastructure:</b>			
<b>Radiological facilities management:</b>			
Space and defense infrastructure.....	20,000	---	20,000
Research reactor infrastructure.....	9,000	9,000	9,000
<b>Subtotal, Radiological facilities management</b>	<b>29,000</b>	<b>9,000</b>	<b>29,000</b>
<b>INL facilities management:</b>			
INL operations and infrastructure.....	288,000	204,000	288,000
<b>Construction:</b>			
16-E-200 Sample preparation laboratory.....	6,000	---	30,000
<b>Subtotal, INL facilities management</b>	<b>294,000</b>	<b>204,000</b>	<b>318,000</b>
<b>Subtotal, Infrastructure</b>	<b>323,000</b>	<b>213,000</b>	<b>347,000</b>
Idaho sitewide safeguards and security.....	133,000	136,090	146,090
Program direction.....	80,000	66,500	80,000
<b>TOTAL, NUCLEAR ENERGY</b>	<b>1,205,056</b>	<b>757,090</b>	<b>1,326,090</b>

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
<b>FOSSIL ENERGY RESEARCH AND DEVELOPMENT</b>			
Coal CCS and Power Systems:			
Carbon Capture.....	100,671	20,000	100,671
Carbon Storage.....	98,096	20,000	98,096
Advanced Energy Systems.....	112,000	135,000	129,683
Cross Cutting Research.....	58,350	78,300	56,350
NETL Coal Research and Development.....	53,000	65,000	54,000
STEP (Supercritical CO2).....	24,000	25,000	22,430
Transformational Coal Pilots.....	35,000	---	25,000
Subtotal, Coal CCS and Power Systems.....	481,117	343,300	486,230
Natural Gas Technologies:			
Research.....	50,000	5,500	51,000
Unconventional fossil energy technologies from petroleum - oil technologies.....	40,000	14,000	46,000
Program direction.....	60,000	61,070	61,070
Special recruitment programs.....	700	200	700
NETL Research and Operations.....	50,000	40,000	50,000
NETL Infrastructure.....	45,000	38,000	45,000
TOTAL, FOSSIL ENERGY RESEARCH AND DEVELOPMENT.....	726,817	502,070	740,000
NAVAL PETROLEUM AND OIL SHALE RESERVES.....	20,200	20,550	10,000
Use of prior year balances.....	-15,300	-10,550	---
TOTAL, NAVAL PETROLEUM AND OIL SHALE RESERVES.....	4,900	10,000	10,000
<b>STRATEGIC PETROLEUM RESERVE</b>			
STRATEGIC PETROLEUM RESERVE.....	252,000	175,105	235,000
Sale of crude oil.....	-350,000	-300,000	-300,000
Use of sale proceeds.....	350,000	---	300,000
TOTAL, STRATEGIC PETROLEUM RESERVE.....	252,000	-124,895	235,000
<b>SPR PETROLEUM ACCOUNT</b>			
SPR Petroleum Account.....	8,400	---	10,000
TOTAL, SPR PETROLEUM ACCOUNT.....	8,400	---	10,000
<b>NORTHEAST HOME HEATING OIL RESERVE</b>			
NORTHEAST HOME HEATING OIL RESERVE.....	10,000	10,000	10,000
Use of prior year balances.....	-3,500	---	---
TOTAL, NORTHEAST HOME HEATING OIL RESERVE.....	6,500	10,000	10,000
ENERGY INFORMATION ADMINISTRATION.....	125,000	115,035	125,000
<b>NON-DEFENSE ENVIRONMENTAL CLEANUP</b>			
Fast Flux Test Reactor Facility (WA).....	2,240	2,240	2,240
Gaseous Diffusion Plants.....	101,304	100,575	101,304

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
Small sites.....	119,856	55,031	131,456
West Valley Demonstration Project.....	75,000	60,554	75,000
TOTAL, NON-DEFENSE ENVIRONMENTAL CLEANUP.....	298,400	218,400	310,000
URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND			
Dak Ridge.....	194,673	151,039	195,000
Nuclear facility D&D, Paducah.....	205,530	202,581	206,000
Portsmouth:			
Nuclear facility D&D, Portsmouth.....	342,389	306,931	366,931
Construction:			
15-U-408 On-site waste disposal facility, Portsmouth.....	38,882	41,168	41,168
Total, Portsmouth.....	381,271	348,099	408,099
Pension and community and regulatory support.....	22,794	21,030	21,030
Title X uranium/thorium reimbursement program.....	35,732	30,000	11,000
TOTAL, UED&D FUND.....	840,000	752,749	841,129
SCIENCE			
Advanced scientific computing research.....	605,000	666,304	702,794
Construction:			
17-SC-20 SC Exascale Computing Project.....	205,000	232,706	232,706
Subtotal, Advanced scientific computing research.....	810,000	899,010	935,500
Basic energy sciences:			
Research.....	1,744,900	1,635,700	1,757,700
Construction:			
13-SC-10 LINAC coherent light source II, SLAC...	192,100	139,300	129,300
18-SC-10 APS Upgrade, ANL.....	93,000	60,000	130,000
18-SC-11 Spallation Neutron Source Proton Power Upgrade (PPU), ORNL.....	36,000	---	60,000
18-SC-12 Advanced Light Source Upgrade (ALS-U), LBNL.....	16,000	10,000	60,000
18-SC-13 LINAC coherent light source II HE, SLAC	8,000	5,000	28,000
19-SC-14 Second Target Station, ORNL.....	---	---	1,000
Subtotal, Construction.....	345,100	214,300	408,300
Subtotal, Basic energy sciences.....	2,090,000	1,850,000	2,166,000
Biological and environmental research.....	673,000	500,000	705,000
Fusion energy sciences:			
Research.....	410,111	265,000	432,000
Construction:			
14-SC-60 ITER.....	122,000	75,000	132,000
Subtotal, Fusion energy sciences.....	532,111	340,000	564,000
High energy physics:			
Research.....	767,600	627,000	800,000

DEPARTMENT OF ENERGY  
 (Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
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Construction:			
11-SC-40 Long baseline neutrino facility / deep underground neutrino experiment, FNAL.....	95,000	113,000	130,000
11-SC-41 Muon to electron conversion experiment, FNAL.....	44,400	30,000	30,000
18-SC-42 PIP-II, FNAL.....	1,000	---	20,000
Subtotal, Construction.....	140,400	143,000	180,000
Subtotal, High energy physics.....	908,000	770,000	980,000
Nuclear physics:			
Operations and maintenance.....	586,800	525,000	615,000
Construction:			
14-SC-50 Facility for rare isotope beams, Michigan State University.....	97,200	75,000	75,000
Subtotal, Nuclear physics.....	684,000	600,000	690,000
Workforce development for teachers and scientists.....	19,500	19,000	22,500
Science laboratories infrastructure:			
Infrastructure support:			
Payment in lieu of taxes.....	1,713	1,513	1,713
Oak Ridge landlord.....	6,382	6,434	6,434
Facilities and infrastructure.....	70,347	30,724	45,543
Oak Ridge nuclear operations.....	26,000	10,000	26,000
Subtotal, Infrastructure support.....	104,442	48,671	79,690
Construction:			
19-SC-71 Science User Support Center, BNL.....	---	2,000	7,000
19-SC-72 Electrical Capacity and Distribution Capability, ANL.....	---	20,000	30,000
19-SC-73 Translational Research Capability, ORNL..	---	---	25,000
19-SC-74 BioEPIC Building, LBNL.....	---	---	5,000
18-SC-71 Energy Sciences Capability, PNNL.....	20,000	4,000	24,000
17-SC-71 Integrated Engineering Research Center, FNAL.....	20,000	5,000	20,000
17-SC-73 Core Facility Revitalization, BNL.....	30,000	13,632	42,200
15-SC-78 Integrative genomics building, LBNL.....	38,350	13,549	---
15-SC-76 Materials design laboratory, ANL.....	44,500	20,000	---
Subtotal, Construction.....	152,850	78,181	153,200
Subtotal, Science laboratories infrastructure.....	257,292	126,852	232,890
Safeguards and security.....	103,000	106,110	106,110
Science program direction.....	183,000	180,000	183,000
TOTAL, SCIENCE.....	6,259,903	5,390,972	6,585,000
	=====	=====	=====
NUCLEAR WASTE DISPOSAL.....	---	90,000	---
ADVANCED RESEARCH PROJECTS AGENCY-ENERGY			
ARPA-E projects.....	324,064	---	334,750
Program direction.....	29,250	---	31,250
TOTAL, ARPA-E.....	353,314	---	366,000

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
-----			
TITLE 17 - INNOVATIVE TECHNOLOGY LOAN GUARANTEE PGM			
Administrative expenses.....	33,000	10,000	33,000
Offsetting collection.....	-10,000	-15,000	-15,000
Rescission.....	---	-240,000	---
-----			
TOTAL, TITLE 17 - INNOVATIVE TECHNOLOGY LOAN GUARANTEE PROGRAM.....	23,000	-245,000	18,000
=====			
ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PGM			
Administrative expenses.....	5,000	1,000	5,000
-----			
TOTAL, ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PROGRAM.....	5,000	1,000	5,000
-----			
TRIBAL ENERGY LOAN GUARANTEE PROGRAM			
Administrative expenses.....	1,000	---	1,000
Rescission.....	---	-8,500	---
-----			
TOTAL, TRIBAL ENERGY LOAN GUARANTEE PROGRAM.....	1,000	-8,500	1,000
-----			
OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS			
Indian energy program.....	---	---	13,200
Program Direction.....	---	---	4,800
-----			
TOTAL, OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS.....	---	---	18,000
-----			
DEPARTMENTAL ADMINISTRATION			
Administrative operations:			
Salaries and expenses:			
Office of the Secretary:			
Program direction.....	5,300	5,395	5,395
Chief Financial Officer.....	48,484	48,912	48,912
Chief Information Officer.....	126,274	96,793	131,624
Office of Indian energy policy and programs.....	18,000	10,005	---
Congressional and intergovernmental affairs.....	6,200	6,212	6,200
Economic impact and diversity.....	10,169	10,005	10,169
Other Departmental Administration.....	174,225	173,901	173,247
-----			
Subtotal, Salaries and expenses.....	388,652	351,223	375,547
-----			
Subtotal, Administrative operations.....	388,652	351,223	375,547
-----			
Strategic partnership projects.....	40,000	40,000	40,000
-----			
Subtotal, Departmental administration.....	428,652	391,223	415,547
-----			
Use of prior-year balances.....	---	-2,000	-2,000
Funding from other defense activities.....	-143,000	-153,689	-151,689
-----			
Total, Departmental administration (gross).....	285,652	235,534	261,858
-----			
Miscellaneous revenues.....	-96,000	-96,000	-96,000
-----			
TOTAL, DEPARTMENTAL ADMINISTRATION (net).....	189,652	139,534	165,858
=====			

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
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OFFICE OF THE INSPECTOR GENERAL			
Office of the inspector general.....	49,000	51,330	51,330
	=====	=====	=====
TOTAL, ENERGY PROGRAMS.....	12,918,049	8,512,504	13,472,407
	=====	=====	=====
ATOMIC ENERGY DEFENSE ACTIVITIES			
NATIONAL NUCLEAR SECURITY ADMINISTRATION			
WEAPONS ACTIVITIES			
Directed stockpile work:			
B61 Life extension program.....	788,572	794,049	794,049
W76 Life extension program.....	224,134	48,888	48,888
W88 Alteration program.....	332,292	304,285	304,285
W80-4 Life extension program.....	399,090	654,766	654,766
IW-1.....	---	53,000	53,000
W76-2 Modification program.....	---	65,000	65,000
Stockpile systems:			
B61 Stockpile systems.....	59,729	64,547	64,547
W76 Stockpile systems.....	51,400	94,300	84,300
W78 Stockpile systems.....	60,100	81,329	81,329
W80 Stockpile systems.....	80,087	80,204	80,204
B83 Stockpile systems.....	35,762	35,082	35,082
W87 Stockpile systems.....	83,200	83,107	83,107
W88 Stockpile systems.....	131,576	180,913	170,913
	-----	-----	-----
Subtotal, Stockpile systems.....	501,854	619,482	599,482
Weapons dismantlement and disposition.....	56,000	56,000	56,000
Stockpile services:			
Production support.....	485,400	512,916	510,000
Research and Development support.....	31,150	38,129	36,150
R and D certification and safety.....	196,840	216,582	201,840
Management, technology, and production.....	285,400	300,736	300,736
	-----	-----	-----
Subtotal, Stockpile systems.....	998,790	1,068,363	1,048,726
Strategic materials:			
Uranium sustainment.....	24,000	87,182	87,182
Plutonium sustainment:			
Plutonium sustainment operations.....	210,367	361,282	286,282
Plutonium pit production project.....	---	---	75,000
	-----	-----	-----
Subtotal, Plutonium sustainment.....	210,367	361,282	361,282
Tritium sustainment.....	198,152	205,275	290,275
Lithium sustainment.....	---	29,135	29,135
Domestic uranium enrichment.....	60,000	100,704	50,000
Strategic materials sustainment.....	216,196	218,794	216,196
	-----	-----	-----
Subtotal, Strategic materials.....	708,715	1,002,372	1,034,070
	-----	-----	-----
Subtotal, Directed stockpile work.....	4,009,447	4,666,205	4,658,266
Research, Development, Test and Evaluation (RDT&E):			
Science:			
Advanced certification.....	57,710	57,710	57,710
Primary assessment technologies.....	89,313	95,057	89,313

DEPARTMENT OF ENERGY  
 (Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
Dynamic materials properties.....	120,000	131,000	120,000
Advanced radiography.....	37,600	32,544	32,544
Secondary assessment technologies.....	76,833	77,553	77,553
Academic alliances and partnerships.....	52,963	53,364	53,364
Enhanced capabilities for subcritical experiments.....	40,105	117,632	50,000
Subtotal, Science.....	474,524	564,860	480,484
Engineering:			
Enhanced surety.....	39,717	43,226	39,717
Weapons system engineering assessment technology.....	23,029	27,536	23,029
Nuclear survivability.....	45,230	48,230	48,230
Enhanced surveillance.....	45,147	58,375	45,147
Stockpile responsiveness.....	30,000	34,000	34,000
Subtotal, Engineering.....	183,123	211,367	190,123
Inertial confinement fusion ignition and high yield:			
Ignition and other stockpile programs.....	---	---	101,140
Ignition.....	79,575	22,434	---
Support of other stockpile programs.....	23,565	17,397	---
Diagnostics, cryogenics and experimental support.....	77,915	51,453	77,915
Pulsed power inertial confinement fusion.....	7,596	8,310	6,596
Joint program in high energy density laboratory plasmas.....	9,492	---	8,492
Facility operations and target production.....	346,791	319,333	350,791
Subtotal, Inertial confinement fusion ignition and high yield.....	544,934	418,927	544,934
Advanced simulation and computing:			
Advanced simulation and computing.....	721,244	656,401	670,119
Construction:			
18-D-670 Exascale class computer cooling equipment, LANL.....	22,000	24,000	24,000
18-D-620 Exascale computing facility modernization project, LLNL.....	3,000	23,000	23,000
Subtotal, Construction.....	25,000	47,000	47,000
Subtotal, Advanced simulation, Computing and Construction.....	746,244	703,401	717,119
Advanced manufacturing development:			
Additive manufacturing.....	12,000	17,447	12,000
Component manufacturing development.....	38,644	48,477	38,644
Process technology development.....	34,896	30,914	30,914
Subtotal, Advanced manufacturing development.....	85,540	96,838	81,558
Subtotal, RDT&E.....	2,034,365	1,995,393	2,014,218
Infrastructure and Operations:			
Operations of facilities.....	848,470	891,000	870,000
Safety and environmental operations.....	110,000	115,000	110,000
Maintenance and repair of facilities.....	515,138	365,000	515,000

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
<b>Recapitalization:</b>			
Infrastructure and safety.....	482,661	431,631	450,000
Capability based investments.....	130,000	109,057	109,057
Subtotal, Recapitalization.....	612,661	540,688	559,057
<b>Construction:</b>			
19-D-670 138kV Power Transmission System Replacement, NNS.....	---	6,000	---
18-D-680 Material staging facility, PX.....	5,200	---	24,000
18-D-660 Fire station, Y-12.....	28,000	---	---
18-D-650 Tritium production capability, SRS.....	---	27,000	---
18-D-690 Lithium production capability, Y-12.....	5,000	19,000	19,000
17-D-640 U1a complex enhancements project, NNSA.....	22,100	53,000	20,000
17-D-630 Electrical distribution system, LLNL.....	6,000	---	---
16-D-515 Albuquerque Complex project.....	98,000	47,953	47,953
15-D-613 Emergency Operations Center, Y-12.....	7,000	---	---
07-D-220 Radioactive liquid waste treatment facility, LANL.....	2,100	---	---
07-D-220-04 TRU liquid waste facility, LANL.....	17,895	---	---
06-D-141 Uranium Processing Facility, Y-12.....	663,000	703,000	703,000
<b>Chemistry and metallurgy replacement (CMRR):</b>			
04-D-125 Chemistry and metallurgy replacement project, LANL.....	---	235,095	219,842
04-D-125-04 RLUOB equipment installation, phase 2.....	127,025	---	---
04-D-125-05 PF-4 equipment installation.....	50,214	---	---
Subtotal, CMRR.....	177,239	235,095	219,842
Subtotal, Construction.....	1,031,534	1,091,048	1,033,795
Subtotal, Infrastructure and Operations.....	3,117,803	3,002,736	3,087,852
<b>Secure transportation asset:</b>			
Operations and equipment.....	185,568	176,617	176,617
Program direction.....	105,600	102,022	102,022
Subtotal, Secure transportation asset.....	291,168	278,639	278,639
<b>Defense nuclear security:</b>			
Defense nuclear security.....	686,977	690,638	690,638
Security improvements program.....	30,000	---	---
<b>Construction:</b>			
17-D-710 West end protected area reduction project, Y-12.....	53,600	---	---
Subtotal, Defense nuclear security.....	770,577	690,638	690,638
Information technology and cyber security.....	186,728	221,175	221,175
Legacy contractor pensions.....	232,050	162,292	162,292
Use of prior year balances.....	---	---	-13,080
<b>TOTAL, WEAPONS ACTIVITIES.....</b>	<b>10,642,138</b>	<b>11,017,078</b>	<b>11,100,000</b>
<b>DEFENSE NUCLEAR NONPROLIFERATION</b>			
<b>Global material security:</b>			
International nuclear security.....	46,339	46,339	46,339
Domestic radiologic security.....	110,433	90,764	127,433



DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
International radiologic security.....	78,907	59,576	78,907
Nuclear smuggling detection.....	154,429	140,429	154,429
Subtotal, Global material security.....	390,108	337,108	407,108
Material management and minimization:			
Conversion.....	---	98,300	---
Nuclear material removal.....	32,925	32,925	32,925
Material disposition.....	183,669	200,869	225,869
Laboratory and partnership support.....	92,000	---	35,000
Subtotal, Material management and minimization....	308,594	332,094	293,794
Nonproliferation and arms control.....	134,703	129,703	129,703
Defense nuclear nonproliferation R&D:			
Proliferation detection.....	278,255	273,200	281,521
Nuclear detonation detection.....	195,749	182,895	195,749
Nonproliferation fuels development.....	82,500	---	98,300
Subtotal, Defense nuclear nonproliferation R&D....	556,504	456,095	575,570
Nonproliferation construction:			
99-D-143 Mixed Oxide (MOX) Fuel Fabrication Facility, SRS.....	335,000	220,000	220,000
18-D-150 Surplus plutonium disposition project, SRS.....	---	59,000	---
Subtotal, Nonproliferation construction.....	335,000	279,000	220,000
Legacy contractor pensions.....	40,950	28,640	28,640
Nuclear counterterrorism and incident response.....	282,360	319,185	319,185
Use of prior-year balances.....	---	-19,000	-25,000
Subtotal, Defense Nuclear Nonproliferation.....	2,048,219	1,862,825	1,949,000
Rescission.....	-49,000	---	-19,000
TOTAL, DEFENSE NUCLEAR NONPROLIFERATION.....	1,999,219	1,862,825	1,930,000
NAVAL REACTORS			
Naval reactors development.....	473,065	514,951	514,951
Columbia-class reactor systems development.....	156,700	138,000	138,000
S8C Prototype refueling.....	250,000	250,000	250,000
Naval reactors operations and infrastructure.....	466,884	525,764	525,764
Construction:			
19-D-930 KS Overhead Piping.....	---	10,994	10,994
17-D-911 BL Fire System Upgrade.....	---	13,200	13,200
15-D-904 NRF Overpack Storage Expansion 3.....	13,700	---	---
15-D-903 KL Fire System Upgrade.....	15,000	---	---
14-D-901 Spent fuel handling recapitalization project, NRF.....	197,000	287,000	287,000
Subtotal, Construction.....	225,700	311,194	311,194
Program direction.....	47,651	48,709	48,709
TOTAL, NAVAL REACTORS.....	1,620,000	1,788,618	1,788,618

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
FEDERAL SALARIES AND EXPENSES.....	407,595	422,529	410,000
TOTAL, NATIONAL NUCLEAR SECURITY ADMINISTRATION.....	14,668,952	15,091,050	15,228,618
DEFENSE ENVIRONMENTAL CLEANUP			
Closure sites administration.....	4,889	4,889	4,889
Richland:			
River corridor and other cleanup operations.....	183,692	89,577	193,692
Central plateau remediation.....	662,879	562,473	660,358
RL Community and regulatory support.....	10,121	5,121	10,121
Construction:			
18-D-404 WESF Modifications and capsule storage...	6,500	1,000	1,000
Subtotal, Richland.....	863,192	658,171	865,171
Office of River Protection:			
Waste treatment and immobilization plant			
commissioning.....	8,000	15,000	15,000
Rad liquid tank waste stabilization and disposition.....	719,000	677,460	771,947
Construction:			
15-D-409 Low activity waste pretreatment system...	93,000	56,053	56,053
01-D-16 A-D Waste treatment and immobilization			
plant.....	---	675,000	---
18-D-16 Waste treatment and immobilization plant -			
LBL/Direct feed LAW.....	630,000	---	655,000
01-D-16 D High-level waste facility.....	75,000	---	60,000
01-D-16 E Pretreatment facility.....	35,000	15,000	15,000
Total, Construction.....	833,000	746,053	786,053
Subtotal, Office of River Protection.....	1,560,000	1,438,513	1,573,000
Idaho National Laboratory:			
Idaho cleanup and waste disposition.....	420,000	346,026	420,000
Idaho community and regulatory support.....	4,071	3,200	3,200
ID Excess facilities D&D.....	10,000	---	10,000
Total, Idaho National Laboratory.....	434,071	349,226	433,200
NNSA sites and Nevada offsites:			
Lawrence Livermore National Laboratory.....	1,175	1,704	1,704
Separations Process Research Unit.....	4,800	15,000	15,000
Nevada.....	60,136	60,136	60,136
Sandia National Laboratory.....	2,600	2,600	2,600
Los Alamos National Laboratory.....	220,000	191,629	220,000
LLNL Excess facilities D&D.....	100,000	---	25,000
Total, NNSA sites and Nevada off-sites.....	388,711	271,069	324,440
Oak Ridge Reservation:			
OR Nuclear facility D&D.....	118,203	90,221	189,000
U233 disposition program.....	50,311	45,000	52,300
OR Cleanup and disposition.....	71,000	67,000	74,000
Construction:			
17-D-401 On-site waste disposal facility.....	10,000	5,000	10,000
14-D-403 Outfall 200 mercury treatment facility.....	17,100	11,274	76,000
Subtotal, Construction.....	27,100	16,274	86,000

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
OR Community & regulatory support.....	5,605	4,711	5,700
OR Technology development and deployment.....	3,000	3,000	3,000
OR Excess facilities D&D.....	125,000	---	---
Total, Oak Ridge Reservation.....	400,219	226,206	410,000
Savannah River Site:			
SR Site risk management operations.....	482,960	517,436	489,460
SR Community and regulatory support.....	11,249	4,749	11,249
SR Radioactive liquid tank waste stabilization and disposition.....	637,105	805,686	696,869
Construction:			
19-D-701 SR Security system replacement.....	---	---	10,000
18-D-402 Saltstone disposal unit #8/9.....	500	37,450	7,577
18-D-402 Emergency Operations Center Replacement, SR.....	500	1,259	1,259
17-D-402 Saltstone disposal Unit #7, SRS.....	30,000	41,243	41,243
05-D-405 Salt waste processing facility, SRS.....	150,000	65,000	130,000
Subtotal, Construction.....	181,000	144,952	190,079
Total, Savannah River Site.....	1,312,314	1,472,823	1,387,857
Waste Isolation Pilot Plant:			
Waste Isolation Pilot Plant.....	270,971	311,695	311,695
Construction:			
15-D-411 Safety significant confinement ventilation system, WIPP.....	86,000	84,212	84,212
15-D-412 Exhaust shaft, WIPP.....	19,600	1,000	1,000
Total, Waste isolation pilot plant.....	376,571	396,907	396,907
Program direction.....	300,000	300,000	298,500
Program support.....	14,979	12,979	12,979
Safeguards and Security.....	298,102	324,434	304,434
Technology development.....	35,000	25,000	25,000
Excess facilities.....	---	150,000	---
Use of prior year balances.....	---	---	-7,577
Subtotal, Defense Environmental Cleanup.....	5,988,048	5,630,217	6,028,600
Rescission.....	---	---	-4,600
TOTAL, DEFENSE ENVIRONMENTAL CLEAN UP.....	5,988,048	5,630,217	6,024,000
OTHER DEFENSE ACTIVITIES			
Environment, health, safety and security:			
Environment, health, safety and security.....	130,693	135,194	133,839
Program direction.....	68,253	70,653	69,000
Subtotal, Environment, Health, safety and security.....	198,946	205,847	202,839
Independent enterprise assessments:			
Independent enterprise assessments.....	24,068	24,068	24,068
Program direction.....	50,863	52,702	52,702
Subtotal, Independent enterprise assessments.....	74,931	76,770	76,770

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
Specialized security activities.....	262,912	254,378	266,378
Office of Legacy Management:			
Legacy management.....	137,674	140,575	140,575
Program direction.....	16,932	18,302	18,302
Subtotal, Office of Legacy Management.....	154,606	158,877	158,877
Defense related administrative support.....	143,000	153,689	151,689
Office of hearings and appeals.....	5,605	5,739	5,739
Use of prior year balances.....	---	-2,000	-2,000
TOTAL, OTHER DEFENSE ACTIVITIES.....	840,000	853,300	860,292
DEFENSE NUCLEAR WASTE DISPOSAL.....	---	30,000	---
TOTAL, ATOMIC ENERGY DEFENSE ACTIVITIES.....	21,497,000	21,604,567	22,112,910
POWER MARKETING ADMINISTRATIONS (1)			
SOUTHEASTERN POWER ADMINISTRATION			
Operation and maintenance:			
Purchase power and wheeling.....	66,070	73,184	68,824
Program direction.....	6,379	6,500	6,500
Subtotal, Operation and maintenance.....	72,449	79,684	75,324
Less alternative financing (PPW).....	-15,070	-13,824	-13,824
Offsetting collections (for PPW).....	-51,000	-59,360	-55,000
Offsetting collections (PD).....	-6,379	-6,500	-6,500
TOTAL, SOUTHEASTERN POWER ADMINISTRATION.....	---	---	---
SOUTHWESTERN POWER ADMINISTRATION			
Operation and maintenance:			
Operating expenses.....	16,680	17,006	17,006
Purchase power and wheeling.....	50,000	93,000	60,000
Program direction.....	31,335	32,995	32,995
Construction.....	14,932	16,875	16,875
Subtotal, Operation and maintenance.....	112,947	159,876	126,876
Less alternative financing (for O&M).....	-9,042	-8,894	-8,894
Less alternative financing (for PPW).....	-10,000	-10,000	-10,000
Less alternative financing (Const).....	-9,417	-12,180	-12,180
Offsetting collections (PD).....	-16,035	-29,695	-29,695
Offsetting collections (for O&M).....	-2,853	-5,707	-5,707
Offsetting collections (for PPW).....	-40,000	-83,000	-50,000
Use of prior year balances.....	-14,200	---	---
TOTAL, SOUTHWESTERN POWER ADMINISTRATION.....	11,400	10,400	10,400
WESTERN AREA POWER ADMINISTRATION			
Operation and maintenance:			
Construction and rehabilitation.....	52,272	32,632	32,632
Operation and maintenance.....	72,407	77,056	77,056
Purchase power and wheeling.....	498,072	567,362	486,396

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
Program direction.....	235,722	238,483	238,483
Subtotal, Operation and maintenance.....	858,473	915,533	834,567
Less alternative financing (for O&M).....	-5,068	-7,758	-7,758
Less alternative financing (for Construction).....	-40,500	-27,077	-27,077
Less alternative financing (for Program Dir.).....	-38,398	-39,136	-39,136
Less alternative financing (for PPW).....	-289,072	-260,954	-260,954
Offsetting collections (for program direction).....	-116,050	-150,761	-150,761
Offsetting collections (for O&M).....	-13,854	-25,009	-25,009
Offsetting collections (P.L. 108-477, P.L. 109-103)	-209,000	-306,408	-225,442
Offsetting collections (P.L. 98-381).....	-9,306	-9,058	-9,058
Use of prior-year balances.....	-43,853	---	---
TOTAL, WESTERN AREA POWER ADMINISTRATION.....	93,372	89,372	89,372
<b>FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND</b>			
Operation and maintenance.....	5,048	5,329	4,440
Offsetting collections.....	-3,948	-4,979	-1,340
Less alternative financing.....	-872	-122	-372
Use of prior-year balances.....	---	---	-2,500
TOTAL, FALCON AND AMISTAD O&M FUND.....	228	228	228
TOTAL, POWER MARKETING ADMINISTRATIONS.....	105,000	100,000	100,000
<b>FEDERAL ENERGY REGULATORY COMMISSION</b>			
Federal Energy Regulatory Commission.....	367,600	369,900	369,900
FERC revenues.....	-367,600	-369,900	-369,900
Total, FEDERAL ENERGY REGULATORY COMMISSION.....	---	---	---
<b>General Provisions</b>			
Title III Rescissions:			
Northeast gasoline supply reserve sale.....	---	-71,000	---
Strategic Petroleum Reserve crude oil sale.....	---	-15,000	---
Strategic Petroleum Reserve use of sale proceeds.....	---	15,000	---
Total, General Provisions.....	---	-71,000	---
GRAND TOTAL, DEPARTMENT OF ENERGY.....	34,520,049	30,146,071	35,685,317
(Total amount appropriated).....	(34,569,049)	(30,394,571)	(35,708,917)
(Rescissions).....	(-49,000)	(-248,500)	(-23,600)
<b>SUMMARY OF ACCOUNTS</b>			
Energy efficiency and renewable energy.....	2,321,778	695,610	2,379,000
Electricity delivery and energy reliability.....	248,329	---	---
Cybersecurity, Energy Security, and Emergency Response	---	95,800	120,000
Electricity delivery.....	---	61,309	156,000
Nuclear energy.....	1,205,056	757,090	1,328,090
Fossil Energy Research and Development.....	728,817	502,070	740,000
Naval Petroleum & Oil Shale Reserves.....	4,900	10,000	10,000
Strategic petroleum reserve.....	252,000	-124,895	235,000
SPR Petroleum Account.....	8,400	---	10,000
Northeast home heating oil reserve.....	8,500	10,000	10,000
Energy Information Administration.....	125,000	115,035	125,000

DEPARTMENT OF ENERGY  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	Conference
Non-Defense Environmental Cleanup .....	298,400	218,400	310,000
Uranium enrichment D&D fund .....	840,000	752,749	841,129
Science .....	6,259,903	5,390,972	6,585,000
Nuclear Waste Disposal .....	---	90,000	---
Advanced Research Projects Agency-Energy .....	353,314	---	366,000
Title 17 Innovative technology loan guarantee program .....	23,000	-245,000	18,000
Advanced technology vehicles manufacturing loan pgm .....	5,000	1,000	5,000
Tribal Energy Loan Guarantee program .....	1,000	-8,500	1,000
Office of Indian Energy Policy and Programs .....	---	---	18,000
Departmental administration .....	189,652	139,534	165,858
Office of the Inspector General .....	49,000	51,330	51,330
Atomic energy defense activities:			
National Nuclear Security Administration:			
Weapons activities .....	10,642,138	11,017,078	11,100,000
Defense nuclear nonproliferation .....	1,999,219	1,862,825	1,930,000
Naval reactors .....	1,620,000	1,788,618	1,788,618
Federal Salaries and Expenses .....	407,595	422,529	410,000
Subtotal, National Nuclear Security Admin. ....	14,668,952	15,091,050	15,228,618
Defense environmental cleanup .....	5,988,048	5,630,217	6,024,000
Other defense activities .....	840,000	853,300	860,292
Defense nuclear waste disposal .....	---	30,000	---
Total, Atomic Energy Defense Activities .....	21,497,000	21,604,567	22,112,910
Power marketing administrations (1):			
Southeastern Power Administration .....	---	---	---
Southwestern Power Administration .....	11,400	10,400	10,400
Western Area Power Administration .....	93,372	89,372	89,372
Falcon and Amistad operating and maintenance fund .....	228	228	228
Total, Power Marketing Administrations .....	105,000	100,000	100,000
Federal Energy Regulatory Commission:			
Salaries and expenses .....	367,600	369,900	369,900
Revenues .....	-367,600	-369,900	-369,900
General Provisions .....	---	-71,000	---
Strategic Petroleum Reserve crude oil sale .....	---	-15,000	---
Strategic Petroleum Reserve use of sale proceeds .....	---	15,000	---
===== Total Summary of Accounts, Department of Energy ..	34,520,049	30,146,071	35,685,317
=====			

1/ Totals include alternative financing costs, reimbursable agreement funding, and power purchase and wheeling expenditures. Offsetting collection totals reflect funds collected for annual expenses, including power purchase and wheeling



DIVISION A, ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS ACT, 2019  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	House	Senate	Conference	Conference vs Enacted
Nuclear Energy.....	1,072,056	621,000	1,200,000	1,073,000	1,180,000	+107,944
Defense function.....	133,000	136,090	146,090	133,000	146,090	+13,090
Subtotal.....	1,205,056	757,090	1,346,090	1,206,000	1,326,090	+121,034
Fossil Energy Research and Development.....	726,817	502,070	785,000	727,000	740,000	+13,183
Naval Petroleum and Oil Shale Reserves.....	4,900	10,000	10,000	10,000	10,000	+5,100
Strategic Petroleum Reserve.....	252,000	175,105	252,000	175,105	235,000	-17,000
Sale of crude oil.....	-350,000	-300,000	-300,000	-350,000	-300,000	+50,000
Use of sale proceeds.....	350,000	---	300,000	350,000	300,000	-50,000
Subtotal.....	252,000	-124,895	252,000	175,105	235,000	-17,000
SPR Petroleum Account.....	8,400	---	10,000	8,400	10,000	+1,600
Northeast Home Heating Oil Reserve.....	6,500	10,000	10,000	10,000	10,000	+3,500
Energy Information Administration.....	125,000	115,035	125,000	125,000	125,000	---
Non-defense Environmental Cleanup.....	298,400	218,400	240,000	353,240	310,000	+11,600
Uranium Enrichment Decontamination and Decommissioning Fund.....	840,000	752,749	870,000	840,818	841,129	+1,129
Science.....	6,259,903	5,390,972	6,600,000	6,650,000	6,585,000	+325,097
Nuclear Waste Disposal.....	---	90,000	190,000	---	---	---
Advanced Research Projects Agency-Energy.....	353,314	---	325,000	375,000	366,000	+12,686
Title 17 Innovative Technology Loan Guarantee Program Offsetting collection.....	33,000	10,000	32,000	33,000	33,000	---
	-10,000	-15,000	-15,000	-15,000	-15,000	-5,000



DIVISION A, ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS ACT, 2019  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	House	Senate	Conference	Conference vs Enacted
Rescission.....	---	-240,000	---	---	---	---
Subtotal.....	23,000	-245,000	17,000	18,000	18,000	-5,000
Advanced Technology Vehicles Manufacturing Loans program.....	5,000	1,000	5,000	5,000	5,000	---
Tribal Energy Loan Guarantee Program.....	1,000	---	1,000	1,000	1,000	---
Rescission.....	---	-8,500	---	---	---	---
Subtotal.....	1,000	-8,500	1,000	1,000	1,000	---
Office of Indian Energy Policy and Programs.....	---	---	---	18,000	18,000	+18,000
Departmental Administration.....	285,652	235,534	275,524	266,000	261,858	-23,794
Miscellaneous revenues.....	-96,000	-96,000	-96,000	-96,000	-96,000	---
Net appropriation.....	189,652	139,534	179,524	170,000	165,858	-23,794
Office of the Inspector General.....	49,000	51,330	51,330	51,330	51,330	+2,330
Total, Energy programs.....	12,918,049	8,512,504	13,421,584	13,325,893	13,472,407	+554,358
Atomic Energy Defense Activities						
National Nuclear Security Administration						
Weapons Activities.....	10,642,138	11,017,078	11,224,000	10,850,000	11,100,000	+457,862

DIVISION A, ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS ACT, 2019  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	House	Senate	Conference	Conference vs Enacted
Defense Nuclear Nonproliferation.....	2,048,219	1,862,825	1,902,000	1,902,000	1,949,000	-99,219
Rescission.....	-49,000	---	---	---	-19,000	+30,000
Subtotal.....	1,999,219	1,862,825	1,902,000	1,902,000	1,930,000	-69,219
Naval Reactors.....	1,620,000	1,788,618	1,788,618	1,620,000	1,788,618	+168,618
Federal Salaries and Expenses.....	407,595	422,529	398,529	408,000	410,000	+2,405
Total, National Nuclear Security Administration.....	14,668,952	15,091,050	15,313,147	14,780,000	15,228,618	+559,666
Environmental and Other Defense Activities						
Defense Environmental Cleanup.....	5,988,048	5,630,217	5,759,220	5,988,000	6,028,600	+40,552
Rescission.....	---	---	---	---	-4,600	-4,600
Subtotal.....	5,988,048	5,630,217	5,759,220	5,988,000	6,024,000	+35,952
Other Defense Activities.....	840,000	853,300	870,300	840,000	860,292	+20,292
Defense nuclear waste disposal.....	---	30,000	30,000	---	---	---
Total, Environmental and Other Defense Activities.....	6,828,048	6,513,517	6,659,520	6,828,000	6,884,292	+56,244
Total, Atomic Energy Defense Activities.....	21,497,000	21,604,567	21,972,667	21,608,000	22,112,910	+615,910

DIVISION A, ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS ACT, 2019  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	House	Senate	Conference	Conference vs Enacted
<b>Power Marketing Administrations /1</b>						
Operation and maintenance, Southeastern Power Administration.....	6,379	6,500	6,500	6,500	6,500	+121
Offsetting collections.....	-6,379	-6,500	-6,500	-6,500	-6,500	-121
Subtotal.....						
Operation and maintenance, Southwestern Power Administration.....	30,288	45,802	45,802	29,802	45,802	+15,514
Offsetting collections.....	-18,888	-35,402	-35,402	-19,402	-35,402	-16,514
Subtotal.....	11,400	10,400	10,400	10,400	10,400	-1,000
Construction, Rehabilitation, Operation and Maintenance, Western Area Power Administration.....	223,276	265,142	265,142	222,142	265,142	+41,866
Offsetting collections.....	-129,904	-175,770	-175,770	-132,770	-175,770	-45,866
Subtotal.....	93,372	89,372	89,372	89,372	89,372	-4,000
Falcon and Amistad Operating and Maintenance Fund.....	4,176	5,207	5,207	5,207	1,568	-2,608
Offsetting collections.....	-3,948	-4,979	-4,979	-4,979	-1,340	+2,608
Subtotal.....	228	228	228	228	228	
Total, Power Marketing Administrations.....	105,000	100,000	100,000	100,000	100,000	-5,000

DIVISION A, ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS ACT, 2019  
(Amounts in thousands)

	FY 2018 Enacted	FY 2019 Request	House	Senate	Conference	Conference vs Enacted
<b>Federal Energy Regulatory Commission</b>						
Salaries and expenses.....	367,600	369,900	369,900	369,900	369,900	+2,300
Revenues applied.....	-367,600	-369,900	-369,900	-369,900	-369,900	-2,300
<b>General Provisions</b>						
<b>Title III Rescissions:</b>						
Northeast gasoline supply reserve sale.....	---	-71,000	---	---	---	---
Strategic Petroleum Reserve crude oil sale.....	---	-15,000	---	---	---	---
Strategic Petroleum Reserve use of sale proceeds.....	---	15,000	---	---	---	---
<b>Total, General Provisions.....</b>	<b>---</b>	<b>-71,000</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>Total, title III, Department of Energy.....</b>						
Appropriations.....	34,520,049	30,146,071	35,494,251	35,033,893	35,685,317	+1,165,268
Rescissions.....	(34,569,049)	(30,394,571)	(35,494,251)	(35,033,893)	(35,708,917)	(+1,139,868)
	(-49,000)	(-248,500)	---	---	(-23,600)	(+25,400)
<b>TITLE IV - INDEPENDENT AGENCIES</b>						
Appalachian Regional Commission.....	155,000	152,000	155,000	155,000	165,000	+10,000
Defense Nuclear Facilities Safety Board.....	31,000	31,243	31,243	31,000	31,000	---
Delta Regional Authority.....	25,000	2,500	15,000	25,000	25,000	---
Denali Commission.....	30,000	7,300	15,000	15,000	15,000	-15,000
Northern Border Regional Commission.....	15,000	850	12,000	20,000	20,000	+5,000