

Department of Energy FY 2019 Congressional Budget Request



Laboratory Tables Preliminary

Department of Energy

FY 2019 Congressional Budget Request



Laboratory Tables

Preliminary

The numbers depicted in this document represent the gross level of DOE budget authority for the years displayed. The figures include both the discretionary and mandatory funding in the budget. They do not consider revenues/receipts, use of prior year balances, deferrals, rescissions, or other adjustments appropriated as offsets to the DOE appropriations by the Congress.



Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 1 of 3

| Page Number | Laboratory / Facility Index | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|-------------|---|-----------------|-----------------------|-----------------|
| 1 | Ames Laboratory | \$53,127 | \$46,009 | \$17,780 |
| 2 | Ames Site Office | \$649 | \$477 | \$642 |
| 3 | Argonne National Laboratory | \$640,901 | \$607,856 | \$652,328 |
| 6 | Argonne Site Office | \$3,897 | \$4,699 | \$4,435 |
| 7 | Bechtel Marine Propulsion Center | \$2,956 | \$453 | \$0 |
| 8 | Berkeley Site Office | \$3,419 | \$3,565 | \$3,945 |
| 9 | Bettis Atomic Power Laboratory | \$500,514 | \$497,115 | \$685,949 |
| 10 | Brookhaven National Laboratory | \$491,126 | \$466,592 | \$475,145 |
| 12 | Brookhaven Site Office | \$4,806 | \$4,755 | \$4,772 |
| 13 | Carlsbad Area Office | \$64,502 | \$63,605 | \$87,008 |
| 14 | Chicago Operations Office | \$888,725 | \$706,100 | \$791,105 |
| 16 | Consolidated Business Center | \$29,753 | \$32,862 | \$35,564 |
| 17 | East Tennessee Technology Park (K25) | \$234,945 | \$233,351 | \$182,320 |
| 18 | Energy Technology Engineering Center | \$10,459 | \$10,388 | \$8,038 |
| 19 | Fermi National Accelerator Laboratory | \$409,392 | \$398,119 | \$445,327 |
| 20 | Fermi Site Office | \$2,663 | \$2,535 | \$2,390 |
| 21 | Fernald Environmental Management Project | \$1,000 | \$993 | \$1,100 |
| 22 | Fernald Site | \$13,369 | \$12,400 | \$12,276 |
| 23 | General Atomics Site | \$25,020 | \$24,850 | \$0 |
| 24 | Golden Field Office | \$316,389 | \$211,117 | \$143,527 |
| 25 | Grand Junction Office | \$35,501 | \$37,362 | \$43,553 |
| 26 | Hanford Site | \$891,475 | \$885,421 | \$741,976 |
| 27 | Idaho National Laboratory | \$1,201,751 | \$1,172,116 | \$1,098,523 |
| 30 | Idaho Operations Office | \$252,950 | \$252,753 | \$199,872 |
| 32 | Kansas City National Security Complex (KCNSC) | \$533,750 | \$530,127 | \$796,827 |
| 33 | Kansas City Site Office | \$242,872 | \$240,974 | \$7,433 |
| 34 | Knolls Atomic Power Laboratory | \$630,981 | \$626,696 | \$740,237 |
| 35 | Lawrence Berkeley National Laboratory | \$736,201 | \$693,199 | \$601,606 |
| 38 | Lawrence Livermore National Laboratory | \$1,454,806 | \$1,438,366 | \$1,482,374 |
| 41 | Lexington Office | \$200 | \$200 | \$200 |
| 42 | Livermore Site Office | \$18,740 | \$18,612 | \$18,645 |
| 43 | Los Alamos National Laboratory | \$2,245,236 | \$2,213,552 | \$2,436,530 |
| 46 | Los Alamos Site Office | \$16,658 | \$16,544 | \$17,251 |
| 47 | Miamisburg Site | \$5,500 | \$5,463 | \$0 |
| 48 | Moab Site | \$37,884 | \$37,626 | \$34,993 |
| 49 | Morgantown Office | \$12,500 | \$16,211 | \$18,274 |
| 50 | Mound Site | \$15,283 | \$14,500 | \$14,446 |
| 51 | National Energy Technology Lab | \$799,177 | \$813,946 | \$520,481 |
| 54 | National Renewable Energy Laboratory | \$327,117 | \$327,546 | \$158,678 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 2 of 3

| Page Number | Laboratory / Facility Index | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|-------------|--|--------------------|--------------------------|--------------------|
| 56 | Naval Petroleum Reserve No 1 | \$13,580 | \$13,487 | \$19,550 |
| 57 | Naval Petroleum Reserve No 3 | \$300 | \$298 | \$0 |
| 58 | Naval Reactors Laboratory Field Office | \$20,660 | \$20,520 | \$21,200 |
| 59 | Naval Research Laboratory | \$13,324 | \$13,233 | \$4,050 |
| 60 | Nevada Field Office | \$112,771 | \$112,319 | \$158,170 |
| 61 | Nevada National Security Site | \$436,244 | \$433,282 | \$484,883 |
| 62 | Nevada Operations Office | \$145 | \$0 | \$0 |
| 63 | New Brunswick Laboratory | \$206 | \$203 | \$228 |
| 64 | New Brunswick Laboratory Program Office | \$2,493 | \$1,511 | \$0 |
| 65 | NNSA Albuquerque Complex | \$489,711 | \$485,969 | \$776,224 |
| 67 | NNSA Production Office (NPO) | \$51,841 | \$51,488 | \$54,314 |
| 68 | Oak Ridge Institute for Science & Education | \$38,249 | \$19,563 | \$14,274 |
| 70 | Oak Ridge National Laboratory | \$1,311,325 | \$1,266,354 | \$1,256,483 |
| 74 | Oak Ridge National Laboratory Site Office | \$6,186 | \$5,766 | \$5,465 |
| 75 | Oak Ridge Office | \$91,946 | \$89,209 | \$98,401 |
| 76 | Oak Ridge Reservation | \$68,457 | \$67,992 | \$67,000 |
| 77 | Oak Ridge Reservation (Off-Site) | \$5,500 | \$5,462 | \$4,711 |
| 78 | Office of River Protection | \$1,458,360 | \$1,448,595 | \$1,414,941 |
| 79 | Office of Scientific & Technical Information | \$11,858 | \$10,875 | \$10,572 |
| 80 | Ohio Field Office | \$5 | \$5 | \$5 |
| 81 | Pacific Northwest National Laboratory | \$592,159 | \$544,268 | \$455,745 |
| 84 | Pacific Northwest Site Office | \$5,105 | \$4,894 | \$5,170 |
| 85 | Paducah Gaseous Diffusion Plant | \$288,349 | \$286,598 | \$286,974 |
| 86 | Pantex Plant | \$754,337 | \$749,214 | \$825,052 |
| 87 | Pinellas Site | \$7,310 | \$5,700 | \$5,545 |
| 88 | Portsmouth Gaseous Diffusion Plant | \$386,171 | \$382,378 | \$418,458 |
| 89 | Princeton Plasma Physics Laboratory | \$80,495 | \$60,326 | \$76,821 |
| 90 | Princeton Site Office | \$1,647 | \$1,794 | \$1,978 |
| 91 | Richland Operations Office | \$147,305 | \$145,745 | \$106,131 |
| 92 | Rocky Flats Site | \$46,418 | \$45,469 | \$36,346 |
| 93 | Sandia National Laboratories | \$1,920,120 | \$1,899,843 | \$2,258,041 |
| 96 | Sandia Site Office | \$20,353 | \$20,215 | \$22,992 |
| 97 | Savannah River National Laboratory | \$8,622 | \$5,481 | \$841 |
| 98 | Savannah River Operations Office | \$197,960 | \$199,179 | \$244,107 |
| 99 | Savannah River Site | \$1,883,804 | \$1,871,011 | \$2,122,708 |
| 100 | Savannah River Site Office | \$5,278 | \$5,242 | \$5,777 |
| 101 | Separations Process Research Unit | \$3,685 | \$3,660 | \$15,000 |
| 102 | SLAC National Accelerator Laboratory | \$552,652 | \$480,226 | \$420,727 |
| 103 | Southeastern Power Administration | \$84,929 | \$84,352 | \$79,684 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 3 of 3

| Page Number | Laboratory / Facility Index | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|----------------------------|--|-----------------|-----------------------|-----------------|
| 104 | Southwestern Power Administration | \$140,898 | \$83,984 | \$159,876 |
| 105 | Stanford Site Office | \$5,457 | \$2,638 | \$2,623 |
| 106 | Strategic Petroleum Reserve - Bayou Choctaw | \$14,339 | \$14,241 | \$11,419 |
| 107 | Strategic Petroleum Reserve - Big Hill | \$25,538 | \$25,365 | \$23,601 |
| 108 | Strategic Petroleum Reserve - Bryan Mound | \$19,057 | \$18,928 | \$19,298 |
| 109 | Strategic Petroleum Reserve - West Hackberry | \$32,520 | \$32,299 | \$19,888 |
| 110 | Strategic Petroleum Reserve Project Office | \$118,600 | \$117,794 | \$88,223 |
| 111 | Thomas Jefferson National Accelerator Facility | \$123,070 | \$111,270 | \$112,412 |
| 112 | Thomas Jefferson Site Office | \$1,905 | \$1,921 | \$2,088 |
| 113 | Undesignated Lab/Plant/Installation | \$16,020 | \$15,935 | \$17,543 |
| 114 | University of Rochester | \$68,000 | \$67,538 | \$45,383 |
| 115 | Washington Headquarters | \$5,046,618 | \$5,628,333 | \$4,459,020 |
| 122 | Waste Isolation Pilot Plant | \$275,089 | \$273,221 | \$330,812 |
| 123 | Weldon Spring Site Office | \$7,911 | \$8,000 | \$2,996 |
| 124 | West Valley Demonstration Project | \$69,628 | \$69,156 | \$63,687 |
| 125 | Western Area Power Administration | \$900,594 | \$684,964 | \$806,152 |
| 126 | Y-12 National Security Complex | \$1,563,781 | \$1,553,161 | \$1,763,360 |
| 127 | Y-12 Site Office | \$64,771 | \$64,332 | \$33,234 |
| 128 | Yucca Mountain Site Office | \$1,900 | \$0 | \$0 |
| Total Department Of Energy | | \$32,771,750 | \$32,283,861 | \$32,225,733 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 1 of 128

| Ames Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$120 | \$120 | \$120 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$120 | \$120 | \$120 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Hydrogen & Fuel Cell Technologies | \$350 | \$250 | \$250 |
| Vehicle Technologies | \$1,400 | \$1,400 | \$0 |
| Advanced Manufacturing | \$25,000 | \$25,000 | \$0 |
| Bioenergy Technologies | \$206 | \$206 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$26,956 | \$26,856 | \$250 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$26,956 | \$26,856 | \$250 |
| Science | | | |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$20,064 | \$15,790 | \$15,479 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$1,200 | \$1,000 | \$0 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$537 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$2,000 | \$0 | \$0 |
| Safeguards and Security | | | |
| Safeguards and Security | \$1,231 | \$1,231 | \$1,231 |
| <i>Total Science</i> | \$25,032 | \$18,021 | \$16,710 |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Advanced Energy Systems | \$500 | \$497 | \$0 |
| Cross Cutting Research | \$519 | \$515 | \$0 |
| <i>Total CCS and Power Systems</i> | \$1,019 | \$1,012 | \$0 |
| Advanced Coal Energy Systems and CCUS | | | |
| Advanced Energy Systems | \$0 | \$0 | \$500 |
| Crosscutting Research | \$0 | \$0 | \$200 |
| <i>Total Advanced Coal Energy Systems and CCUS</i> | \$0 | \$0 | \$700 |
| <i>Total Fossil Energy Research and Development</i> | \$1,019 | \$1,012 | \$700 |
| <i>Total Ames Laboratory</i> | \$53,127 | \$46,009 | \$17,780 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 2 of 128

| Ames Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|-------------------------------|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$649 | \$477 | \$642 |
| <i>Total Science</i> | \$649 | \$477 | \$642 |
| <i>Total Ames Site Office</i> | \$649 | \$477 | \$642 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 3 of 128

| Argonne National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| <i>Electricity Delivery and Energy Reliability</i> | | | |
| Transmission Reliability | \$2,301 | \$2,600 | \$1,495 |
| Resilient Distribution Systems | \$4,233 | \$5,956 | \$1,775 |
| Cybersecurity for Energy Delivery Systems | \$3,498 | \$654 | \$0 |
| Energy Storage | \$399 | \$0 | \$0 |
| Transformer Resilience and Advanced Components | \$104 | \$0 | \$50 |
| Transmission Permitting and Technical Assistance | \$190 | \$277 | \$250 |
| Infrastructure Security & Energy Restoration | \$125 | \$125 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$10,850 | \$9,612 | \$3,570 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$10,850 | \$9,612 | \$3,570 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| <i>Cybersecurity, Energy Security, and Emergency Resp</i> | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$1,000 |
| CEDS | \$0 | \$0 | \$654 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$1,654 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$1,654 |
| Nuclear Energy | | | |
| <i>Fuel Cycle R & D</i> | | | |
| Fuel Cycle R & D | \$14,463 | \$13,391 | \$1,212 |
| <i>Nuclear Energy Enabling Technologies</i> | | | |
| Nuclear Energy Enabling Technologies | \$6,368 | \$5,385 | \$6,230 |
| <i>Reactors Concepts RD&D</i> | | | |
| Reactors Concepts RD&D | \$15,316 | \$13,787 | \$11,800 |
| <i>International Nuclear Energy Cooperation</i> | | | |
| International Nuclear Energy Cooperation | \$738 | \$325 | \$70 |
| <i>Total Nuclear Energy</i> | \$36,885 | \$32,888 | \$19,312 |
| Energy Efficiency and Renewable Energy | | | |
| <i>Energy Efficiency and Renewable Energy</i> | | | |
| Wind Energy | \$1,601 | \$1,601 | \$427 |
| Hydrogen & Fuel Cell Technologies | \$8,603 | \$3,385 | \$2,985 |
| Water Power | \$1,552 | \$365 | \$320 |
| Solar Energy | \$519 | \$1,000 | \$0 |
| Vehicle Technologies | \$55,204 | \$55,204 | \$14,665 |
| Building Technologies | \$1,329 | \$1,320 | \$263 |
| Bioenergy Technologies | \$6,055 | \$6,055 | \$2,675 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$74,863 | \$68,930 | \$21,335 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$74,863 | \$68,930 | \$21,335 |
| Nuclear Waste Disposal | | | |
| <i>Yucca Mountain and Interim Storage</i> | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$800 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 4 of 128

| Argonne National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$800 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$83,956 | \$112,272 | \$149,196 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$267,871 | \$221,300 | \$274,509 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$31,823 | \$28,234 | \$21,461 |
| High Energy Physics | | | |
| High Energy Physics | \$15,765 | \$14,839 | \$11,700 |
| Nuclear Physics | | | |
| Nuclear Physics | \$30,791 | \$30,608 | \$30,270 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$1,420 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$21,993 | \$24,839 | \$59,224 |
| Safeguards and Security | | | |
| Safeguards and Security | \$9,240 | \$9,259 | \$9,284 |
| <i>Total Science</i> | \$462,859 | \$441,351 | \$555,644 |
| Weapons Activities | | | |
| Science | | | |
| Science Campaign | \$700 | \$695 | \$820 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$500 | \$497 | \$0 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$1,500 | \$1,490 | \$0 |
| <i>Total Weapons Activities</i> | \$2,700 | \$2,682 | \$820 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$945 | \$945 | \$945 |
| <i>Total Other Defense Activities</i> | \$945 | \$945 | \$945 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$10,673 | \$10,601 | \$5,294 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$3,226 | \$3,204 | \$3,500 |
| Global Material Security | | | |
| Global Material Security | \$2,130 | \$2,116 | \$1,952 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$26,808 | \$26,626 | \$27,855 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$8,962 | \$8,901 | \$9,363 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 5 of 128

| Argonne National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <i>Total Defense Nuclear Nonproliferation</i> | \$51,799 | \$51,448 | \$47,964 |
| Fossil Energy Research and Development | | | |
| Advanced Coal Energy Systems and CCUS | | | |
| Advanced Energy Systems | \$0 | \$0 | \$284 |
| <i>Total Fossil Energy Research and Development</i> | \$0 | \$0 | \$284 |
| <i>Total Argonne National Laboratory</i> | \$640,901 | \$607,856 | \$652,328 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 6 of 128

| Argonne Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|----------------------------------|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$3,897 | \$4,699 | \$4,435 |
| <i>Total Science</i> | \$3,897 | \$4,699 | \$4,435 |
| <i>Total Argonne Site Office</i> | \$3,897 | \$4,699 | \$4,435 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 7 of 128

| Bechtel Marine Propulsion Center | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$2,500 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Nuclear Energy</i> | \$2,500 | \$0 | \$0 |
| | | | |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$456 | \$453 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$456 | \$453 | \$0 |
| <hr/> | | | |
| <i>Total Bechtel Marine Propulsion Center</i> | \$2,956 | \$453 | \$0 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 8 of 128

| Berkeley Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|-----------------------------------|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$3,419 | \$3,565 | \$3,945 |
| <i>Total Science</i> | \$3,419 | \$3,565 | \$3,945 |
| <i>Total Berkeley Site Office</i> | \$3,419 | \$3,565 | \$3,945 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 9 of 128

| Bettis Atomic Power Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Naval Reactors | | | |
| Naval Reactors Program | | | |
| Naval Reactors Program | \$500,514 | \$497,115 | \$685,949 |
| <i>Total Naval Reactors</i> | \$500,514 | \$497,115 | \$685,949 |
| <i>Total Bettis Atomic Power Laboratory</i> | \$500,514 | \$497,115 | \$685,949 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 10 of 128

| Brookhaven National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Non-Defense Environmental Cleanup | | | |
| Small Sites | | | |
| Small Sites | \$0 | \$0 | \$2,000 |
| <hr/> | | | |
| <i>Total Non-Defense Environmental Cleanup</i> | \$0 | \$0 | \$2,000 |
| <hr/> | | | |
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$581 | \$650 | \$433 |
| Resilient Distribution Systems | \$91 | \$122 | \$85 |
| Cybersecurity for Energy Delivery Systems | \$233 | \$200 | \$0 |
| Energy Storage | \$8 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$913 | \$972 | \$518 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$913 | \$972 | \$518 |
| <hr/> | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| CEDS | \$0 | \$0 | \$200 |
| <hr/> | | | |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$200 |
| <hr/> | | | |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$2,084 | \$1,959 | \$733 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$0 | \$150 | \$150 |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$75 | \$98 | \$85 |
| International Nuclear Energy Cooperation | | | |
| International Nuclear Energy Cooperation | \$0 | \$0 | \$5 |
| <hr/> | | | |
| <i>Total Nuclear Energy</i> | \$2,159 | \$2,207 | \$973 |
| <hr/> | | | |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Geothermal Technologies | \$425 | \$425 | \$0 |
| Hydrogen & Fuel Cell Technologies | \$1,252 | \$300 | \$300 |
| Solar Energy | \$500 | \$0 | \$0 |
| Vehicle Technologies | \$2,557 | \$2,557 | \$900 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$4,734 | \$3,282 | \$1,200 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$4,734 | \$3,282 | \$1,200 |
| <hr/> | | | |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$1,180 | \$1,116 | \$732 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$179,634 | \$169,433 | \$162,837 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$10,657 | \$9,301 | \$9,106 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 11 of 128

| Brookhaven National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| High Energy Physics | | | |
| High Energy Physics | \$69,736 | \$63,300 | \$68,221 |
| Nuclear Physics | | | |
| Nuclear Physics | \$195,089 | \$191,827 | \$189,095 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$1,763 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$1,800 | \$1,788 | \$15,632 |
| Safeguards and Security | | | |
| Safeguards and Security | \$12,369 | \$12,347 | \$12,659 |
| <i>Total Science</i> | \$472,228 | \$449,112 | \$458,282 |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$216 | \$215 | \$325 |
| <i>Total Weapons Activities</i> | \$216 | \$215 | \$325 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$250 | \$250 | \$250 |
| <i>Total Other Defense Activities</i> | \$250 | \$250 | \$250 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$3,196 | \$3,174 | \$2,729 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$2,916 | \$2,896 | \$3,900 |
| Global Material Security | | | |
| Global Material Security | \$580 | \$576 | \$577 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$55 | \$55 | \$371 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$3,879 | \$3,853 | \$3,820 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$10,626 | \$10,554 | \$11,397 |
| <i>Total Brookhaven National Laboratory</i> | \$491,126 | \$466,592 | \$475,145 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 12 of 128

| Brookhaven Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|-------------------------------------|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$4,806 | \$4,755 | \$4,772 |
| <i>Total Science</i> | \$4,806 | \$4,755 | \$4,772 |
| <i>Total Brookhaven Site Office</i> | \$4,806 | \$4,755 | \$4,772 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 13 of 128

| Carlsbad Area Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Defense Nuclear Nonproliferation | | | |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$100 | \$99 | \$1,500 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$100 | \$99 | \$1,500 |
| Defense Environmental Cleanup | | | |
| Waste Isolation Pilot Plant | | | |
| Operation and Maintenance | \$0 | \$0 | \$46,695 |
| Central Characterization Project | \$19,534 | \$19,401 | \$19,500 |
| <i>Total Waste Isolation Pilot Plant</i> | \$19,534 | \$19,401 | \$66,195 |
| Program Direction | | | |
| Carlsbad | \$12,868 | \$12,323 | \$12,733 |
| Safeguards and Security | | | |
| Waste Isolation Pilot Plant | \$5,200 | \$5,164 | \$6,580 |
| CB-0101-Economic Assistance to the State of NM | | | |
| CB-0101-Economic Assistance to the State of NM | \$26,800 | \$26,618 | \$0 |
| <i>Total Defense Environmental Cleanup</i> | \$64,402 | \$63,506 | \$85,508 |
| <i>Total Carlsbad Area Office</i> | \$64,502 | \$63,605 | \$87,008 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 14 of 128

| Chicago Operations Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$74 | \$0 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$74 | \$0 | \$0 |
| Nuclear Energy | | | |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$40 | \$400 | \$400 |
| <i>Total Nuclear Energy</i> | \$40 | \$400 | \$400 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Hydrogen & Fuel Cell Technologies | \$6 | \$0 | \$0 |
| Vehicle Technologies | \$10 | \$10 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$16 | \$10 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$16 | \$10 | \$0 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$31,158 | \$27,190 | \$28,400 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$269,867 | \$178,058 | \$325,748 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$115,488 | \$89,550 | \$91,133 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$156,622 | \$108,877 | \$95,978 |
| High Energy Physics | | | |
| High Energy Physics | \$106,215 | \$97,873 | \$68,410 |
| Nuclear Physics | | | |
| Nuclear Physics | \$182,072 | \$177,766 | \$153,502 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$1,764 | \$1,752 | \$1,513 |
| Safeguards and Security | | | |
| Safeguards and Security | \$45 | \$50 | \$50 |
| Program Direction | | | |
| Program Direction | \$23,614 | \$22,835 | \$23,721 |
| <i>Total Science</i> | \$886,845 | \$703,951 | \$788,455 |
| Weapons Activities | | | |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$1,500 | \$1,490 | \$2,000 |
| <i>Total Weapons Activities</i> | \$1,500 | \$1,490 | \$2,000 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$50 | \$50 | \$50 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 15 of 128

| Chicago Operations Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <i>Total Other Defense Activities</i> | \$50 | \$50 | \$50 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$200 | \$199 | \$200 |
| <i>Total Departmental Administration</i> | \$200 | \$199 | \$200 |
| <i>Total Chicago Operations Office</i> | \$888,725 | \$706,100 | \$791,105 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 16 of 128

| Consolidated Business Center | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$530 | \$526 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$530 | \$526 | \$0 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$259 | \$259 | \$259 |
| <hr/> | | | |
| <i>Total Other Defense Activities</i> | \$259 | \$259 | \$259 |
| Defense Nuclear Nonproliferation | | | |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$100 | \$99 | \$0 |
| <hr/> | | | |
| <i>Total Defense Nuclear Nonproliferation</i> | \$100 | \$99 | \$0 |
| Defense Environmental Cleanup | | | |
| Closure Sites | | | |
| Miamisburg | \$0 | \$0 | \$1,789 |
| Program Direction | | | |
| Consolidated Business Center | \$28,864 | \$31,978 | \$33,516 |
| <hr/> | | | |
| <i>Total Defense Environmental Cleanup</i> | \$28,864 | \$31,978 | \$35,305 |
| <hr/> | | | |
| <i>Total Consolidated Business Center</i> | \$29,753 | \$32,862 | \$35,564 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 17 of 128

| East Tennessee Technology Park (K25) | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Non-Defense Environmental Cleanup | | | |
| Small Sites | | | |
| Oak Ridge – ETPP | \$6,000 | \$5,959 | \$0 |
| <hr/> | | | |
| <i>Total Non-Defense Environmental Cleanup</i> | \$6,000 | \$5,959 | \$0 |
| | | | |
| Uranium Enrichment Decon. & Decom. Fund | | | |
| Uranium Enrichment D&D Fund | | | |
| Pension & comm & Reg Suport Oak Ridge | \$18,772 | \$18,645 | \$17,258 |
| Oak Ridge | \$194,673 | \$193,352 | \$151,039 |
| <hr/> | | | |
| <i>Total Uranium Enrichment D&D Fund</i> | \$213,445 | \$211,997 | \$168,297 |
| <hr/> | | | |
| <i>Total Uranium Enrichment Decon. & Decom. Fund</i> | \$213,445 | \$211,997 | \$168,297 |
| | | | |
| Defense Environmental Cleanup | | | |
| Safeguards and Security | | | |
| Oak Ridge Reservation | \$15,500 | \$15,395 | \$14,023 |
| <hr/> | | | |
| <i>Total Defense Environmental Cleanup</i> | \$15,500 | \$15,395 | \$14,023 |
| <hr/> | | | |
| <i>Total East Tennessee Technology Park (K25)</i> | \$234,945 | \$233,351 | \$182,320 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 18 of 128

| Energy Technology Engineering Center | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Non-Defense Environmental Cleanup | | | |
| Small Sites | | | |
| Small Sites | \$10,459 | \$10,388 | \$8,038 |
| <i>Total Non-Defense Environmental Cleanup</i> | \$10,459 | \$10,388 | \$8,038 |
| <i>Total Energy Technology Engineering Center</i> | \$10,459 | \$10,388 | \$8,038 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 19 of 128

| Fermi National Accelerator Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <i>Science</i> | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$530 | \$341 | \$174 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$1,424 | \$390 | \$1,424 |
| High Energy Physics | | | |
| High Energy Physics | \$398,992 | \$389,513 | \$430,311 |
| Nuclear Physics | | | |
| Nuclear Physics | \$455 | \$30 | \$30 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$210 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$2,500 | \$2,483 | \$8,000 |
| Safeguards and Security | | | |
| Safeguards and Security | \$5,281 | \$5,362 | \$5,388 |
| <i>Total Science</i> | \$409,392 | \$398,119 | \$445,327 |
| <i>Total Fermi National Accelerator Laboratory</i> | \$409,392 | \$398,119 | \$445,327 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 20 of 128

| Fermi Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--------------------------------|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$2,663 | \$2,535 | \$2,390 |
| <i>Total Science</i> | \$2,663 | \$2,535 | \$2,390 |
| <i>Total Fermi Site Office</i> | \$2,663 | \$2,535 | \$2,390 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 21 of 128

| Fernald Environmental Management Project | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Defense Environmental Cleanup | | | |
| Closure Sites | | | |
| Fernald | \$1,000 | \$993 | \$1,100 |
| <i>Total Defense Environmental Cleanup</i> | \$1,000 | \$993 | \$1,100 |
| <i>Total Fernald Environmental Management Project</i> | \$1,000 | \$993 | \$1,100 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 22 of 128

| Fernald Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---------------------------------------|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$13,369 | \$12,400 | \$12,276 |
| <i>Total Other Defense Activities</i> | \$13,369 | \$12,400 | \$12,276 |
| <i>Total Fernald Site</i> | \$13,369 | \$12,400 | \$12,276 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 23 of 128

| General Atomics Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Science | | | |
| Science Campaign | \$500 | \$497 | \$0 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$24,520 | \$24,353 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$25,020 | \$24,850 | \$0 |
| <hr/> | | | |
| <i>Total General Atomics Site</i> | \$25,020 | \$24,850 | \$0 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 24 of 128

| Golden Field Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Resilient Distribution Systems | \$25 | \$0 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$25 | \$0 | \$0 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Wind Energy | \$40,000 | \$4,000 | \$5,000 |
| Program Direction | \$23,641 | \$23,641 | \$20,170 |
| Geothermal Technologies | \$7,578 | \$7,578 | \$18,628 |
| Hydrogen & Fuel Cell Technologies | \$17,800 | \$500 | \$17,500 |
| Water Power | \$47,596 | \$52,096 | \$18,459 |
| Solar Energy | \$48,649 | \$2,000 | \$21,000 |
| Vehicle Technologies | \$0 | \$0 | \$9,000 |
| Building Technologies | \$18,401 | \$18,276 | \$15,206 |
| Federal Energy Management Program | \$1,721 | \$1,721 | \$650 |
| Weatherization | \$739 | \$739 | \$0 |
| State Energy Program Grants | \$6,900 | \$6,900 | \$0 |
| Advanced Manufacturing | \$48,884 | \$48,884 | \$17,914 |
| Strategic Programs | \$3,827 | \$500 | \$0 |
| Bioenergy Technologies | \$40,982 | \$40,982 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$306,718 | \$207,817 | \$143,527 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$306,718 | \$207,817 | \$143,527 |
| Departmental Administration | | | |
| Office of Indian Energy | | | |
| Office of Indian Energy | \$9,646 | \$3,300 | \$0 |
| <i>Total Departmental Administration</i> | \$9,646 | \$3,300 | \$0 |
| <i>Total Golden Field Office</i> | \$316,389 | \$211,117 | \$143,527 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 25 of 128

| Grand Junction Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---------------------------------------|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$35,501 | \$37,362 | \$43,553 |
| <i>Total Other Defense Activities</i> | \$35,501 | \$37,362 | \$43,553 |
| <i>Total Grand Junction Office</i> | \$35,501 | \$37,362 | \$43,553 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 26 of 128

| Hanford Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Non-Defense Environmental Cleanup | | | |
| Fast Flux Test Reactor Facility | | | |
| Fast Flux Test Reactor Facility | \$2,240 | \$2,225 | \$2,240 |
| <hr/> | | | |
| <i>Total Non-Defense Environmental Cleanup</i> | \$2,240 | \$2,225 | \$2,240 |
| | | | |
| Defense Environmental Cleanup | | | |
| Hanford Site | | | |
| Central Plateau Remediation | \$671,304 | \$666,745 | \$563,473 |
| River Corridor & Other Cleanup Operations | \$143,755 | \$142,779 | \$89,577 |
| <hr/> | | | |
| <i>Total Hanford Site</i> | \$815,059 | \$809,524 | \$653,050 |
| Safeguards and Security | | | |
| Richland/Hanford Site | \$74,176 | \$73,672 | \$86,686 |
| <hr/> | | | |
| <i>Total Defense Environmental Cleanup</i> | \$889,235 | \$883,196 | \$739,736 |
| <hr/> | | | |
| <i>Total Hanford Site</i> | \$891,475 | \$885,421 | \$741,976 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 27 of 128

| Idaho National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Non-Defense Environmental Cleanup | | | |
| Small Sites | | | |
| Small Sites | \$8,000 | \$7,946 | \$10,000 |
| <i>Total Non-Defense Environmental Cleanup</i> | \$8,000 | \$7,946 | \$10,000 |
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$149 | \$0 | \$0 |
| Resilient Distribution Systems | \$3,131 | \$536 | \$0 |
| Cybersecurity for Energy Delivery Systems | \$15,172 | \$5,672 | \$0 |
| Energy Storage | \$141 | \$0 | \$0 |
| Transformer Resilience and Advanced Components | \$500 | \$0 | \$150 |
| Infrastructure Security & Energy Restoration | \$300 | \$300 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$19,393 | \$6,508 | \$150 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$19,393 | \$6,508 | \$150 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$1,000 |
| CEDS | \$0 | \$0 | \$19,900 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$20,900 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$20,900 |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$44,411 | \$39,846 | \$14,439 |
| Radiological Facilities Management | | | |
| Radiological Facilities Management | \$6,934 | \$6,813 | \$8,933 |
| Idaho Facilities Management | | | |
| Idaho Facilities Management | \$230,415 | \$229,298 | \$197,200 |
| Idaho Sitewide Safeguards and Security | | | |
| Idaho Sitewide Safeguards and Security | \$125,208 | \$123,552 | \$132,478 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$50,959 | \$45,233 | \$42,833 |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$51,181 | \$57,678 | \$53,200 |
| International Nuclear Energy Cooperation | | | |
| International Nuclear Energy Cooperation | \$597 | \$540 | \$448 |
| SMR Licensing Technical Support | | | |
| SMR Licensing Technical Support | \$525 | \$0 | \$0 |
| Supercritical Transformational Electric Power Generation | | | |
| Supercritical Transformational Electric Power Generation | \$45 | \$0 | \$0 |
| <i>Total Nuclear Energy</i> | \$510,275 | \$502,960 | \$449,531 |
| Energy Efficiency and Renewable Energy | | | |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 28 of 128

| Idaho National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Energy Efficiency and Renewable Energy | | | |
| Wind Energy | \$811 | \$811 | \$0 |
| Geothermal Technologies | \$1,773 | \$1,773 | \$719 |
| Hydrogen & Fuel Cell Technologies | \$4,993 | \$625 | \$625 |
| Water Power | \$1,088 | \$530 | \$304 |
| Vehicle Technologies | \$10,695 | \$10,695 | \$3,675 |
| Federal Energy Management Program | \$400 | \$400 | \$200 |
| Bioenergy Technologies | \$18,637 | \$18,637 | \$3,651 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$38,397 | \$33,471 | \$9,174 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$38,397 | \$33,471 | \$9,174 |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$10 |
| <hr/> | | | |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$10 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$0 | \$70 | \$70 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$900 | \$900 | \$900 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$1,300 | \$1,350 | \$2,400 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$344 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Science</i> | \$2,544 | \$2,320 | \$3,370 |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$3,456 | \$3,433 | \$3,368 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$720 | \$715 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$4,176 | \$4,148 | \$3,368 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$150 | \$150 | \$150 |
| <hr/> | | | |
| <i>Total Other Defense Activities</i> | \$150 | \$150 | \$150 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$26,385 | \$26,206 | \$6,825 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$3,745 | \$3,720 | \$4,100 |
| Global Material Security | | | |
| Global Material Security | \$8,519 | \$8,461 | \$8,824 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 29 of 128

| Idaho National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Material Management and Minimization | | | |
| Material Management and Minimization | \$40,287 | \$40,013 | \$35,024 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$2,178 | \$2,163 | \$2,266 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$81,114 | \$80,563 | \$57,039 |
| Naval Reactors | | | |
| Naval Reactors Program | | | |
| Naval Reactors Program | \$155,614 | \$154,557 | \$195,605 |
| <i>Total Naval Reactors</i> | \$155,614 | \$154,557 | \$195,605 |
| Defense Environmental Cleanup | | | |
| Idaho National Laboratory | | | |
| Idaho Community and Regulatory Support | \$3,000 | \$2,980 | \$3,200 |
| Idaho Clean-up and Waste Disposition | \$379,088 | \$376,513 | \$346,026 |
| <i>Total Idaho National Laboratory</i> | \$382,088 | \$379,493 | \$349,226 |
| <i>Total Defense Environmental Cleanup</i> | \$382,088 | \$379,493 | \$349,226 |
| <i>Total Idaho National Laboratory</i> | \$1,201,751 | \$1,172,116 | \$1,098,523 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 30 of 128

| Idaho Operations Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Permitting and Technical Assistance | \$0 | \$46 | \$25 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$0 | \$46 | \$25 |
| Nuclear Energy | | | |
| University Research Program | | | |
| University Research | \$4,984 | \$4,898 | \$0 |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$51,297 | \$53,456 | \$26,374 |
| Radiological Facilities Management | | | |
| Radiological Facilities Management | \$43 | \$42 | \$42 |
| Idaho Facilities Management | | | |
| Idaho Facilities Management | \$5,800 | \$5,500 | \$5,500 |
| Idaho Sitewide Safeguards and Security | | | |
| Idaho Sitewide Safeguards and Security | \$3,673 | \$3,100 | \$3,100 |
| Program Direction-NE | | | |
| Program Direction-NE | \$33,122 | \$33,702 | \$33,702 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$13,821 | \$24,789 | \$45,025 |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$36,424 | \$23,662 | \$72,630 |
| International Nuclear Energy Cooperation | | | |
| International Nuclear Energy Cooperation | \$1,265 | \$1,379 | \$1,285 |
| SMR Licensing Technical Support | | | |
| SMR Licensing Technical Support | \$94,178 | \$93,163 | \$0 |
| Supercritical Transformational Electric Power Generation | | | |
| Supercritical Transformational Electric Power Generation | \$36 | \$0 | \$0 |
| <i>Total Nuclear Energy</i> | \$244,643 | \$243,691 | \$187,658 |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$2,940 |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$2,940 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$400 | \$400 | \$400 |
| <i>Total Other Defense Activities</i> | \$400 | \$400 | \$400 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$1,000 | \$993 | \$1,000 |
| <i>Total Departmental Administration</i> | \$1,000 | \$993 | \$1,000 |
| Defense Environmental Cleanup | | | |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 31 of 128

| Idaho Operations Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Program Direction | | | |
| Idaho | \$6,907 | \$7,623 | \$7,849 |
| <i>Total Defense Environmental Cleanup</i> | \$6,907 | \$7,623 | \$7,849 |
| <i>Total Idaho Operations Office</i> | \$252,950 | \$252,753 | \$199,872 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 32 of 128

| Kansas City National Security Complex (KCNSC) | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$307,657 | \$305,568 | \$569,279 |
| Science | | | |
| Science Campaign | \$776 | \$771 | \$0 |
| Engineering | | | |
| Engineering Campaign | \$2,878 | \$2,858 | \$3,794 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$500 | \$497 | \$750 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$11,527 | \$11,449 | \$12,534 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$5,928 | \$5,888 | \$5,882 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$139,580 | \$138,632 | \$141,600 |
| Secure Transportation Asset | | | |
| Secure Transportation Asset | \$20,907 | \$20,765 | \$18,497 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$13,567 | \$13,475 | \$17,913 |
| Total Weapons Activities | \$503,320 | \$499,903 | \$770,249 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$10 | \$10 | \$10 |
| Total Other Defense Activities | \$10 | \$10 | \$10 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$355 | \$353 | \$402 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$27,657 | \$27,469 | \$23,900 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$2,408 | \$2,392 | \$2,266 |
| Total Defense Nuclear Nonproliferation | \$30,420 | \$30,214 | \$26,568 |
| Total Kansas City National Security Complex (KCNSC) | \$533,750 | \$530,127 | \$796,827 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 33 of 128

| Kansas City Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Nuclear Energy | | | |
| Idaho Facilities Management | | | |
| Idaho Facilities Management | \$250 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Nuclear Energy</i> | \$250 | \$0 | \$0 |
| | | | |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$236,044 | \$234,441 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$236,044 | \$234,441 | \$0 |
| | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$6,578 | \$6,533 | \$7,433 |
| <hr/> | | | |
| <i>Total Federal Salaries and Expenses</i> | \$6,578 | \$6,533 | \$7,433 |
| <hr/> | | | |
| <i>Total Kansas City Site Office</i> | \$242,872 | \$240,974 | \$7,433 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 34 of 128

| Knolls Atomic Power Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Naval Reactors | | | |
| Naval Reactors Program | | | |
| Naval Reactors Program | \$630,981 | \$626,696 | \$740,237 |
| <i>Total Naval Reactors</i> | \$630,981 | \$626,696 | \$740,237 |
| <i>Total Knolls Atomic Power Laboratory</i> | \$630,981 | \$626,696 | \$740,237 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 35 of 128

| Lawrence Berkeley National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Non-Defense Environmental Cleanup | | | |
| Small Sites | | | |
| Small Sites | \$9,200 | \$9,138 | \$0 |
| <hr/> | | | |
| <i>Total Non-Defense Environmental Cleanup</i> | \$9,200 | \$9,138 | \$0 |
| <hr/> | | | |
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$3,180 | \$2,760 | \$578 |
| Resilient Distribution Systems | \$2,449 | \$1,537 | \$250 |
| Cybersecurity for Energy Delivery Systems | \$1,428 | \$1,050 | \$0 |
| Energy Storage | \$1,269 | \$0 | \$0 |
| Transformer Resilience and Advanced Components | \$276 | \$0 | \$50 |
| Transmission Permitting and Technical Assistance | \$3,214 | \$2,700 | \$1,995 |
| Infrastructure Security & Energy Restoration | \$175 | \$175 | \$0 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$11,991 | \$8,222 | \$2,873 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$11,991 | \$8,222 | \$2,873 |
| <hr/> | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$100 |
| CEDS | \$0 | \$0 | \$1,050 |
| <hr/> | | | |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$1,150 |
| <hr/> | | | |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$1,150 |
| <hr/> | | | |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$3,547 | \$3,699 | \$572 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$50 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Nuclear Energy</i> | \$3,597 | \$3,699 | \$572 |
| <hr/> | | | |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Wind Energy | \$2,102 | \$2,102 | \$636 |
| Geothermal Technologies | \$3,570 | \$3,570 | \$3,721 |
| Hydrogen & Fuel Cell Technologies | \$5,689 | \$1,945 | \$1,695 |
| Solar Energy | \$6,961 | \$1,300 | \$0 |
| Vehicle Technologies | \$15,318 | \$15,318 | \$4,700 |
| Building Technologies | \$38,277 | \$38,017 | \$9,026 |
| Federal Energy Management Program | \$3,803 | \$3,803 | \$1,025 |
| Weatherization | \$150 | \$150 | \$0 |
| State Energy Program Grants | \$562 | \$562 | \$0 |
| Advanced Manufacturing | \$4,500 | \$4,500 | \$4,500 |
| Strategic Programs | \$1,418 | \$1,763 | \$0 |
| Bioenergy Technologies | \$10,316 | \$10,316 | \$3,322 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$92,666 | \$83,346 | \$28,625 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 36 of 128

| Lawrence Berkeley National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <i>Total Energy Efficiency and Renewable Energy</i> | \$92,666 | \$83,346 | \$28,625 |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$840 |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$840 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$147,542 | \$149,833 | \$146,015 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$168,617 | \$148,912 | \$164,458 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$149,272 | \$138,789 | \$125,698 |
| High Energy Physics | | | |
| High Energy Physics | \$67,319 | \$76,449 | \$64,874 |
| Nuclear Physics | | | |
| Nuclear Physics | \$22,030 | \$21,418 | \$21,465 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$1,298 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$28,561 | \$19,428 | \$22,049 |
| Safeguards and Security | | | |
| Safeguards and Security | \$7,169 | \$7,209 | \$7,134 |
| <i>Total Science</i> | \$591,808 | \$562,038 | \$551,693 |
| Weapons Activities | | | |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$650 | \$646 | \$650 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$2,400 | \$2,384 | \$0 |
| <i>Total Weapons Activities</i> | \$3,050 | \$3,030 | \$650 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$7,726 | \$7,674 | \$8,749 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$0 | \$0 | \$600 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$960 | \$953 | \$854 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$8,686 | \$8,627 | \$10,203 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$3,500 | \$3,476 | \$3,500 |
| <i>Total Departmental Administration</i> | \$3,500 | \$3,476 | \$3,500 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 37 of 128

| Lawrence Berkeley National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Storage | \$8,212 | \$8,156 | \$0 |
| Cross Cutting Research | \$2,091 | \$2,077 | \$0 |
| <hr/> | | | |
| <i>Total CCS and Power Systems</i> | \$10,303 | \$10,233 | \$0 |
| Advanced Coal Energy Systems and CCUS | | | |
| Carbon Capture Utilization and Storage | \$0 | \$0 | \$1,500 |
| Natural Gas Technologies | | | |
| Natural Gas Technologies | \$1,400 | \$1,390 | \$0 |
| <hr/> | | | |
| <i>Total Fossil Energy Research and Development</i> | \$11,703 | \$11,623 | \$1,500 |
| <hr/> | | | |
| <i>Total Lawrence Berkeley National Laboratory</i> | \$736,201 | \$693,199 | \$601,606 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 38 of 128

| Lawrence Livermore National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$2,178 | \$1,725 | \$1,156 |
| Resilient Distribution Systems | \$1,913 | \$1,466 | \$0 |
| Cybersecurity for Energy Delivery Systems | \$4,075 | \$1,900 | \$0 |
| Energy Storage | \$386 | \$0 | \$0 |
| Transformer Resilience and Advanced Components | \$219 | \$0 | \$0 |
| Infrastructure Security & Energy Restoration | \$200 | \$200 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | <i>\$8,971</i> | <i>\$5,291</i> | <i>\$1,156</i> |
| <i>Total Electricity Delivery and Energy Reliability</i> | <i>\$8,971</i> | <i>\$5,291</i> | <i>\$1,156</i> |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$500 |
| CEDS | \$0 | \$0 | \$1,900 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | <i>\$0</i> | <i>\$0</i> | <i>\$2,400</i> |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | <i>\$0</i> | <i>\$0</i> | <i>\$2,400</i> |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$651 | \$992 | \$142 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$850 | \$475 | \$475 |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$50 | \$58 | \$50 |
| <i>Total Nuclear Energy</i> | <i>\$1,551</i> | <i>\$1,525</i> | <i>\$667</i> |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Wind Energy | \$902 | \$902 | \$615 |
| Geothermal Technologies | \$1,180 | \$1,180 | \$165 |
| Hydrogen & Fuel Cell Technologies | \$2,585 | \$1,412 | \$2,162 |
| Solar Energy | \$1,789 | \$0 | \$0 |
| Vehicle Technologies | \$3,974 | \$3,974 | \$1,430 |
| Building Technologies | \$108 | \$107 | \$23 |
| Advanced Manufacturing | \$5,829 | \$5,829 | \$6,000 |
| Bioenergy Technologies | \$963 | \$963 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | <i>\$17,330</i> | <i>\$14,367</i> | <i>\$10,395</i> |
| <i>Total Energy Efficiency and Renewable Energy</i> | <i>\$17,330</i> | <i>\$14,367</i> | <i>\$10,395</i> |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$3,171 | \$5,249 | \$4,445 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$2,094 | \$926 | \$926 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 39 of 128

| Lawrence Livermore National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$26,968 | \$23,214 | \$14,733 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$6,800 | \$8,222 | \$7,734 |
| High Energy Physics | | | |
| High Energy Physics | \$1,150 | \$3,440 | \$1,205 |
| Nuclear Physics | | | |
| Nuclear Physics | \$1,687 | \$843 | \$1,453 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$414 | \$0 | \$0 |
| <i>Total Science</i> | \$42,284 | \$41,894 | \$30,496 |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$219,434 | \$217,944 | \$351,459 |
| Science | | | |
| Science Campaign | \$126,394 | \$125,536 | \$147,207 |
| Engineering | | | |
| Engineering Campaign | \$22,812 | \$22,657 | \$41,523 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$330,383 | \$328,139 | \$286,931 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$272,571 | \$270,720 | \$205,295 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$53,583 | \$53,219 | \$66,389 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$16,616 | \$16,503 | \$14,122 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$214,094 | \$212,640 | \$189,715 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$6,599 | \$6,554 | \$10,900 |
| <i>Total Weapons Activities</i> | \$1,262,486 | \$1,253,912 | \$1,313,541 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$3,050 | \$3,050 | \$3,050 |
| <i>Total Other Defense Activities</i> | \$3,050 | \$3,050 | \$3,050 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$46,596 | \$46,280 | \$50,531 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$44,230 | \$43,930 | \$44,000 |
| Global Material Security | | | |
| Global Material Security | \$7,556 | \$7,505 | \$6,756 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$16,173 | \$16,063 | \$16,757 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 40 of 128

| Lawrence Livermore National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <i>Total Defense Nuclear Nonproliferation</i> | \$114,555 | \$113,778 | \$118,044 |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Capture | \$2,983 | \$2,963 | \$0 |
| Advanced Energy Systems | \$149 | \$148 | \$0 |
| Cross Cutting Research | \$300 | \$298 | \$0 |
| <i>Total CCS and Power Systems</i> | \$3,432 | \$3,409 | \$0 |
| Advanced Coal Energy Systems and CCUS | | | |
| Carbon Capture Utilization and Storage | \$0 | \$0 | \$1,450 |
| <i>Total Fossil Energy Research and Development</i> | \$3,432 | \$3,409 | \$1,450 |
| Defense Environmental Cleanup | | | |
| NNSA Sites | | | |
| NNSA Sites | \$1,147 | \$1,140 | \$1,175 |
| <i>Total Defense Environmental Cleanup</i> | \$1,147 | \$1,140 | \$1,175 |
| <i>Total Lawrence Livermore National Laboratory</i> | \$1,454,806 | \$1,438,366 | \$1,482,374 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 41 of 128

| Lexington Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$200 | \$200 | \$200 |
| <i>Total Other Defense Activities</i> | \$200 | \$200 | \$200 |
| <i>Total Lexington Office</i> | \$200 | \$200 | \$200 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 42 of 128

| Livermore Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$846 | \$840 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$846 | \$840 | \$0 |
| | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$17,894 | \$17,772 | \$18,645 |
| <hr/> | | | |
| <i>Total Federal Salaries and Expenses</i> | \$17,894 | \$17,772 | \$18,645 |
| <hr/> | | | |
| <i>Total Livermore Site Office</i> | \$18,740 | \$18,612 | \$18,645 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 43 of 128

| Los Alamos National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$3,980 | \$1,841 | \$1,444 |
| Resilient Distribution Systems | \$1,567 | \$1,873 | \$600 |
| Cybersecurity for Energy Delivery Systems | \$2,632 | \$200 | \$0 |
| Energy Storage | \$34 | \$0 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$8,213 | \$3,914 | \$2,044 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$8,213 | \$3,914 | \$2,044 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| CEDS | \$0 | \$0 | \$200 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$200 |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$9,622 | \$11,888 | \$3,000 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$2,449 | \$3,850 | \$2,350 |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$117 | \$0 | \$0 |
| <i>Total Nuclear Energy</i> | \$12,188 | \$15,738 | \$5,350 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Wind Energy | \$193 | \$193 | \$0 |
| Geothermal Technologies | \$2,338 | \$2,338 | \$546 |
| Hydrogen & Fuel Cell Technologies | \$8,573 | \$3,310 | \$2,710 |
| Solar Energy | \$430 | \$800 | \$0 |
| Vehicle Technologies | \$1,675 | \$1,675 | \$110 |
| Building Technologies | \$293 | \$291 | \$56 |
| Bioenergy Technologies | \$7,619 | \$7,619 | \$2,300 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$21,121 | \$16,226 | \$5,722 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$21,121 | \$16,226 | \$5,722 |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$840 |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$840 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$1,620 | \$3,003 | \$2,518 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$23,635 | \$17,513 | \$17,005 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 44 of 128

| Los Alamos National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$28,182 | \$23,634 | \$17,254 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$3,121 | \$3,390 | \$3,090 |
| High Energy Physics | | | |
| High Energy Physics | \$2,100 | \$1,930 | \$1,400 |
| Nuclear Physics | | | |
| Nuclear Physics | \$10,979 | \$9,066 | \$9,292 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$448 | \$0 | \$0 |
| <i>Total Science</i> | \$70,085 | \$58,536 | \$50,559 |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$619,653 | \$615,445 | \$713,231 |
| Science | | | |
| Science Campaign | \$153,089 | \$152,049 | \$190,886 |
| Engineering | | | |
| Engineering Campaign | \$27,369 | \$27,183 | \$47,048 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$17,610 | \$17,490 | \$15,000 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$202,574 | \$201,198 | \$181,011 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$99,951 | \$99,272 | \$110,340 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$15,410 | \$15,305 | \$17,716 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$532,542 | \$528,925 | \$623,132 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$10,866 | \$10,792 | \$7,950 |
| <i>Total Weapons Activities</i> | \$1,679,064 | \$1,667,659 | \$1,906,314 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$95 | \$95 | \$95 |
| <i>Total Other Defense Activities</i> | \$95 | \$95 | \$95 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$109,358 | \$108,615 | \$115,733 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$45,667 | \$45,357 | \$49,200 |
| Global Material Security | | | |
| Global Material Security | \$32,530 | \$32,309 | \$35,619 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$39,316 | \$39,049 | \$51,685 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 45 of 128

| Los Alamos National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$27,262 | \$27,077 | \$23,484 |
| <hr/> | | | |
| <i>Total Defense Nuclear Nonproliferation</i> | \$254,133 | \$252,407 | \$275,721 |
| | | | |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Capture | \$941 | \$935 | \$0 |
| Carbon Storage | \$7,530 | \$7,479 | \$0 |
| Cross Cutting Research | \$400 | \$397 | \$0 |
| <hr/> | | | |
| <i>Total CCS and Power Systems</i> | \$8,871 | \$8,811 | \$0 |
| Advanced Coal Energy Systems and CCUS | | | |
| Carbon Capture Utilization and Storage | \$0 | \$0 | \$1,450 |
| Natural Gas Technologies | | | |
| Natural Gas Technologies | \$860 | \$854 | \$0 |
| <hr/> | | | |
| <i>Total Fossil Energy Research and Development</i> | \$9,731 | \$9,665 | \$1,450 |
| | | | |
| Defense Environmental Cleanup | | | |
| NNSA Sites | | | |
| NNSA Sites | \$190,606 | \$189,312 | \$188,235 |
| <hr/> | | | |
| <i>Total Defense Environmental Cleanup</i> | \$190,606 | \$189,312 | \$188,235 |
| <hr/> | | | |
| <i>Total Los Alamos National Laboratory</i> | \$2,245,236 | \$2,213,552 | \$2,436,530 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 46 of 128

| Los Alamos Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$1,405 | \$1,395 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$1,405 | \$1,395 | \$0 |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$15,253 | \$15,149 | \$17,251 |
| <hr/> | | | |
| <i>Total Federal Salaries and Expenses</i> | \$15,253 | \$15,149 | \$17,251 |
| <hr/> | | | |
| <i>Total Los Alamos Site Office</i> | \$16,658 | \$16,544 | \$17,251 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 47 of 128

| Miamisburg Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Non-Defense Environmental Cleanup | | | |
| Small Sites | | | |
| Southwest Experimental Fast Oxide Reactor | \$5,500 | \$5,463 | \$0 |
| <i>Total Non-Defense Environmental Cleanup</i> | \$5,500 | \$5,463 | \$0 |
| <i>Total Miamisburg Site</i> | \$5,500 | \$5,463 | \$0 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 48 of 128

| Moab Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Non-Defense Environmental Cleanup | | | |
| Small Sites | | | |
| Small Sites | \$37,884 | \$37,626 | \$34,993 |
| <i>Total Non-Defense Environmental Cleanup</i> | \$37,884 | \$37,626 | \$34,993 |
| <i>Total Moab Site</i> | \$37,884 | \$37,626 | \$34,993 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 49 of 128

| Morgantown Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---------------------------------------|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$12,500 | \$16,211 | \$18,274 |
| <i>Total Other Defense Activities</i> | \$12,500 | \$16,211 | \$18,274 |
| <i>Total Morgantown Office</i> | \$12,500 | \$16,211 | \$18,274 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 50 of 128

| Mound Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---------------------------------------|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$15,283 | \$14,500 | \$14,446 |
| <i>Total Other Defense Activities</i> | \$15,283 | \$14,500 | \$14,446 |
| <i>Total Mound Site</i> | \$15,283 | \$14,500 | \$14,446 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 51 of 128

| National Energy Technology Lab | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$4,202 | \$8,104 | \$0 |
| Resilient Distribution Systems | \$3,770 | \$7,995 | \$0 |
| Cybersecurity for Energy Delivery Systems | \$8,671 | \$17,524 | \$0 |
| Transformer Resilience and Advanced Components | \$106 | \$4,845 | \$500 |
| Transmission Permitting and Technical Assistance | \$1,494 | \$1,200 | \$1,250 |
| Infrastructure Security & Energy Restoration | \$647 | \$647 | \$0 |
| Program Direction | \$6,484 | \$6,873 | \$4,688 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$25,374 | \$47,188 | \$6,438 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$25,374 | \$47,188 | \$6,438 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$1,000 |
| CEDS | \$0 | \$0 | \$25,709 |
| Program Direction | \$0 | \$0 | \$2,894 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$29,603 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$29,603 |
| Nuclear Energy | | | |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$50 | \$50 | \$0 |
| <i>Total Nuclear Energy</i> | \$50 | \$50 | \$0 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Program Direction | \$10,411 | \$10,411 | \$0 |
| Geothermal Technologies | \$35,309 | \$35,309 | \$0 |
| Hydrogen & Fuel Cell Technologies | \$2,320 | \$0 | \$0 |
| Solar Energy | \$291 | \$0 | \$0 |
| Vehicle Technologies | \$101,442 | \$101,442 | \$0 |
| Building Technologies | \$13,823 | \$13,729 | \$50 |
| Bioenergy Technologies | \$231 | \$231 | \$200 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$163,827 | \$161,122 | \$250 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$163,827 | \$161,122 | \$250 |
| Science | | | |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$200 | \$0 | \$0 |
| <i>Total Science</i> | \$200 | \$0 | \$0 |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$11,684 | \$11,605 | \$21,698 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 52 of 128

| National Energy Technology Lab | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Science | | | |
| Science Campaign | \$1,080 | \$1,073 | \$0 |
| Engineering | | | |
| Engineering Campaign | \$345 | \$343 | \$0 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$250 | \$248 | \$0 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$408 | \$405 | \$0 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$575 | \$571 | \$0 |
| <i>Total Weapons Activities</i> | \$14,342 | \$14,245 | \$21,698 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$150 | \$149 | \$150 |
| <i>Total Departmental Administration</i> | \$150 | \$149 | \$150 |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Capture | \$93,257 | \$92,623 | \$0 |
| Carbon Storage | \$74,924 | \$74,415 | \$0 |
| Advanced Energy Systems | \$100,304 | \$99,623 | \$0 |
| Cross Cutting Research | \$32,711 | \$32,489 | \$0 |
| STEP (Supercritical CO2) | \$24,000 | \$23,837 | \$0 |
| NETL Coal R&D | \$53,000 | \$52,640 | \$0 |
| <i>Total CCS and Power Systems</i> | \$378,196 | \$375,627 | \$0 |
| Advanced Coal Energy Systems and CCUS | | | |
| Advanced Energy Systems | \$0 | \$0 | \$172,336 |
| Carbon Capture Utilization and Storage | \$0 | \$0 | \$32,950 |
| STEP (Supercritical CO2) | \$0 | \$0 | \$25,000 |
| NETL Coal Research and Development | \$0 | \$0 | \$50,000 |
| Crosscutting Research | \$0 | \$0 | \$53,100 |
| <i>Total Advanced Coal Energy Systems and CCUS</i> | \$0 | \$0 | \$333,386 |
| Natural Gas Technologies | | | |
| Natural Gas Technologies | \$35,587 | \$35,346 | \$5,500 |
| Program Direction | | | |
| NETL Program Direction | \$28,266 | \$28,074 | \$31,000 |
| Unconventional FE Technologies from Petroleum – Oil | | | |
| Unconventional FE Technologies from Petroleum – Oil | \$19,229 | \$19,098 | \$14,000 |
| NETL Research and Operations | | | |
| NETL Research and Operations | \$43,000 | \$42,708 | \$40,000 |
| NETL Infrastructure | | | |
| NETL Infrastructure | \$40,500 | \$40,226 | \$38,000 |
| Fossil Fuel Pilots | | | |
| Fossil Fuel Pilots | \$50,000 | \$49,660 | \$0 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 53 of 128

| National Energy Technology Lab | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <i>Total Fossil Energy Research and Development</i> | \$594,778 | \$590,739 | \$461,886 |
| Strategic Petroleum Reserve | | | |
| SPR Geotechnical Analytical Support | | | |
| SPR - Facilities Development | \$456 | \$453 | \$456 |
| <i>Total Strategic Petroleum Reserve</i> | \$456 | \$453 | \$456 |
| <i>Total National Energy Technology Lab</i> | \$799,177 | \$813,946 | \$520,481 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 54 of 128

| National Renewable Energy Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| <i>Electricity Delivery and Energy Reliability</i> | | | |
| Transmission Reliability | \$1,097 | \$600 | \$0 |
| Resilient Distribution Systems | \$4,201 | \$4,826 | \$250 |
| Cybersecurity for Energy Delivery Systems | \$1,104 | \$1,050 | \$0 |
| Energy Storage | \$1,185 | \$0 | \$0 |
| Transformer Resilience and Advanced Components | \$100 | \$0 | \$0 |
| Transmission Permitting and Technical Assistance | \$777 | \$443 | \$220 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$8,464 | \$6,919 | \$470 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$8,464 | \$6,919 | \$470 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| <i>Cybersecurity, Energy Security, and Emergency Resp</i> | | | |
| CEDS | \$0 | \$0 | \$1,050 |
| <hr/> | | | |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$1,050 |
| Energy Efficiency and Renewable Energy | | | |
| <i>Energy Efficiency and Renewable Energy</i> | | | |
| Wind Energy | \$28,187 | \$28,187 | \$14,676 |
| Facilities and Infrastructure (NREL) | \$92,000 | \$91,375 | \$90,000 |
| Geothermal Technologies | \$3,479 | \$3,479 | \$718 |
| Hydrogen & Fuel Cell Technologies | \$19,999 | \$7,946 | \$7,746 |
| Water Power | \$8,647 | \$7,747 | \$2,254 |
| Solar Energy | \$28,657 | \$47,869 | \$6,500 |
| Vehicle Technologies | \$28,642 | \$28,642 | \$8,523 |
| Building Technologies | \$19,640 | \$19,507 | \$1,342 |
| Federal Energy Management Program | \$6,563 | \$6,563 | \$2,872 |
| Weatherization | \$1,124 | \$1,124 | \$0 |
| State Energy Program Grants | \$730 | \$730 | \$0 |
| Advanced Manufacturing | \$250 | \$250 | \$0 |
| Strategic Programs | \$6,309 | \$8,083 | \$0 |
| Bioenergy Technologies | \$57,748 | \$57,748 | \$13,700 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$301,975 | \$309,250 | \$148,331 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$301,975 | \$309,250 | \$148,331 |
| Science | | | |
| <i>Basic Energy Sciences</i> | | | |
| Basic Energy Sciences | \$12,459 | \$7,632 | \$6,947 |
| <i>Biological and Environmental Research</i> | | | |
| Biological and Environmental Research | \$500 | \$604 | \$580 |
| <i>Workforce Development for Teachers and Scientists</i> | | | |
| Workforce Development for Teachers and Scientists | \$1,208 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Science</i> | \$14,167 | \$8,236 | \$7,527 |
| Departmental Administration | | | |
| <i>Office of Indian Energy</i> | | | |
| Office of Indian Energy | \$1,950 | \$2,583 | \$800 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 55 of 128

| National Renewable Energy Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$500 | \$497 | \$500 |
| <hr/> | | | |
| <i>Total Departmental Administration</i> | \$2,450 | \$3,080 | \$1,300 |
| | | | |
| Fossil Energy Research and Development | | | |
| Natural Gas Technologies | | | |
| Natural Gas Technologies | \$61 | \$61 | \$0 |
| <hr/> | | | |
| <i>Total Fossil Energy Research and Development</i> | \$61 | \$61 | \$0 |
| <hr/> | | | |
| <i>Total National Renewable Energy Laboratory</i> | \$327,117 | \$327,546 | \$158,678 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 56 of 128

| Naval Petroleum Reserve No 1 | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Naval Petroleum and Oil Shale Reserves | | | |
| Naval Petroleum and Oil Shale Reserves | | | |
| Productions Operations | \$12,580 | \$12,494 | \$18,550 |
| Management | \$1,000 | \$993 | \$1,000 |
| <hr/> | | | |
| <i>Total Naval Petroleum and Oil Shale Reserves</i> | \$13,580 | \$13,487 | \$19,550 |
| <hr/> | | | |
| <i>Total Naval Petroleum and Oil Shale Reserves</i> | \$13,580 | \$13,487 | \$19,550 |
| <hr/> | | | |
| <i>Total Naval Petroleum Reserve No 1</i> | \$13,580 | \$13,487 | \$19,550 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 57 of 128

| Naval Petroleum Reserve No 3 | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Naval Petroleum and Oil Shale Reserves | | | |
| Naval Petroleum and Oil Shale Reserves | | | |
| Productions Operations | \$50 | \$50 | \$0 |
| Management | \$250 | \$248 | \$0 |
| <i>Total Naval Petroleum and Oil Shale Reserves</i> | \$300 | \$298 | \$0 |
| <i>Total Naval Petroleum and Oil Shale Reserves</i> | \$300 | \$298 | \$0 |
| <i>Total Naval Petroleum Reserve No 3</i> | \$300 | \$298 | \$0 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 58 of 128

| Naval Reactors Laboratory Field Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$960 | \$953 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$960 | \$953 | \$0 |
| | | | |
| Naval Reactors | | | |
| Program Direction | | | |
| Program Direction | \$19,700 | \$19,567 | \$21,200 |
| <hr/> | | | |
| <i>Total Naval Reactors</i> | \$19,700 | \$19,567 | \$21,200 |
| <hr/> | | | |
| <i>Total Naval Reactors Laboratory Field Office</i> | \$20,660 | \$20,520 | \$21,200 |

Department Of Energy
 FY 2019 Congressional Budget

2/23/2018
 2:02:34PM
 Page 59 of 128

Laboratory Table
 (Dollars In Thousands)

| Naval Research Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Science | | | |
| Science Campaign | \$4,074 | \$4,046 | \$4,050 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$8,500 | \$8,442 | \$0 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$750 | \$745 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$13,324 | \$13,233 | \$4,050 |
| <hr/> | | | |
| <i>Total Naval Research Laboratory</i> | \$13,324 | \$13,233 | \$4,050 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 60 of 128

| Nevada Field Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Nuclear Energy | | | |
| Program Direction-NE | | | |
| Program Direction-NE | \$2,536 | \$2,517 | \$0 |
| <i>Total Nuclear Energy</i> | \$2,536 | \$2,517 | \$0 |
| <hr/> | | | |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$40,736 |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$40,736 |
| <hr/> | | | |
| Weapons Activities | | | |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$71,634 | \$71,148 | \$74,470 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$3,892 | \$3,865 | \$0 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$23 | \$23 | \$0 |
| <i>Total Weapons Activities</i> | \$75,549 | \$75,036 | \$74,470 |
| <hr/> | | | |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$15 | \$15 | \$15 |
| <i>Total Other Defense Activities</i> | \$15 | \$15 | \$15 |
| <hr/> | | | |
| Defense Nuclear Nonproliferation | | | |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$50 | \$50 | \$0 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$50 | \$50 | \$0 |
| <hr/> | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$17,169 | \$17,052 | \$17,653 |
| <i>Total Federal Salaries and Expenses</i> | \$17,169 | \$17,052 | \$17,653 |
| <hr/> | | | |
| Defense Environmental Cleanup | | | |
| Program Direction | | | |
| Nevada | \$2,512 | \$2,810 | \$2,898 |
| NNSA Sites | | | |
| NNSA Sites | \$14,940 | \$14,839 | \$22,398 |
| <i>Total Defense Environmental Cleanup</i> | \$17,452 | \$17,649 | \$25,296 |
| <hr/> | | | |
| <i>Total Nevada Field Office</i> | \$112,771 | \$112,319 | \$158,170 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 61 of 128

| Nevada National Security Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$47,285 | \$46,964 | \$48,450 |
| Science | | | |
| Science Campaign | \$50,400 | \$50,058 | \$71,168 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$13,000 | \$12,912 | \$0 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$4,191 | \$4,163 | \$4,337 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$193,492 | \$192,178 | \$233,907 |
| Secure Transportation Asset | | | |
| Secure Transportation Asset | \$311 | \$309 | \$20 |
| <i>Total Weapons Activities</i> | \$308,679 | \$306,584 | \$357,882 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$22,337 | \$22,185 | \$26,295 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$55,823 | \$55,444 | \$60,905 |
| Global Material Security | | | |
| Global Material Security | \$1,168 | \$1,160 | \$1,025 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$1,001 | \$994 | \$1,038 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$80,329 | \$79,783 | \$89,263 |
| Defense Environmental Cleanup | | | |
| NNSA Sites | | | |
| NNSA Sites | \$47,236 | \$46,915 | \$37,738 |
| <i>Total Defense Environmental Cleanup</i> | \$47,236 | \$46,915 | \$37,738 |
| <i>Total Nevada National Security Site</i> | \$436,244 | \$433,282 | \$484,883 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 62 of 128

| Nevada Operations Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---------------------------------------|--------------------|--------------------------|--------------------|
| Science | | | |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$145 | \$0 | \$0 |
| <i>Total Science</i> | \$145 | \$0 | \$0 |
| <i>Total Nevada Operations Office</i> | \$145 | \$0 | \$0 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 63 of 128

| New Brunswick Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Defense Nuclear Nonproliferation | | | |
| Global Material Security | | | |
| Global Material Security | \$86 | \$84 | \$88 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$120 | \$119 | \$140 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$206 | \$203 | \$228 |
| <i>Total New Brunswick Laboratory</i> | \$206 | \$203 | \$228 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 64 of 128

| New Brunswick Laboratory Program Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$2,493 | \$1,511 | \$0 |
| <i>Total Science</i> | \$2,493 | \$1,511 | \$0 |
| <i>Total New Brunswick Laboratory Program Office</i> | \$2,493 | \$1,511 | \$0 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 65 of 128

| NNSA Albuquerque Complex | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$134,323 | \$133,411 | \$338,952 |
| Science | | | |
| Science Campaign | \$29,758 | \$29,556 | \$49,552 |
| Engineering | | | |
| Engineering Campaign | \$3,980 | \$3,953 | \$23,108 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$16,485 | \$16,373 | \$403 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$20,629 | \$20,489 | \$20,750 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$7,385 | \$7,335 | \$7,614 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$18,642 | \$18,516 | \$71,483 |
| Secure Transportation Asset | | | |
| Secure Transportation Asset | \$82,005 | \$81,449 | \$88,075 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$981 | \$974 | \$4,483 |
| Total Weapons Activities | \$314,188 | \$312,056 | \$604,420 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$1,000 | \$1,000 | \$1,000 |
| Enterprise Assessments | | | |
| Enterprise Assessments | \$250 | \$150 | \$150 |
| Total Enterprise Assessments | \$250 | \$150 | \$150 |
| Total Other Defense Activities | \$1,250 | \$1,150 | \$1,150 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$31,568 | \$31,354 | \$35,749 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$5,049 | \$5,015 | \$0 |
| Global Material Security | | | |
| Global Material Security | \$89,613 | \$89,004 | \$89,534 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$22,261 | \$22,110 | \$1,545 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$3,005 | \$2,985 | \$2,439 |
| Nonproliferation Construction | | | |
| Nonproliferation Construction | \$5,276 | \$5,240 | \$23,800 |
| Total Defense Nuclear Nonproliferation | \$156,772 | \$155,708 | \$153,067 |
| Departmental Administration | | | |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 66 of 128

| NNSA Albuquerque Complex | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$8,500 | \$8,442 | \$8,500 |
| <i>Total Departmental Administration</i> | \$8,500 | \$8,442 | \$8,500 |
| Defense Environmental Cleanup | | | |
| Program Direction | | | |
| Los Alamos | \$5,358 | \$4,995 | \$5,164 |
| NNSA Sites | | | |
| NNSA Sites | \$3,643 | \$3,618 | \$3,923 |
| <i>Total Defense Environmental Cleanup</i> | \$9,001 | \$8,613 | \$9,087 |
| <i>Total NNSA Albuquerque Complex</i> | \$489,711 | \$485,969 | \$776,224 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 67 of 128

| NNSA Production Office (NPO) | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$0 | \$0 | \$1,250 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$2,705 | \$2,686 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$2,705 | \$2,686 | \$1,250 |
| Defense Nuclear Nonproliferation | | | |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$24,020 | \$23,857 | \$26,500 |
| <hr/> | | | |
| <i>Total Defense Nuclear Nonproliferation</i> | \$24,020 | \$23,857 | \$26,500 |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$25,116 | \$24,945 | \$26,564 |
| <hr/> | | | |
| <i>Total Federal Salaries and Expenses</i> | \$25,116 | \$24,945 | \$26,564 |
| <hr/> | | | |
| <i>Total NNSA Production Office (NPO)</i> | \$51,841 | \$51,488 | \$54,314 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 68 of 128

| Oak Ridge Institute for Science & Education | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$50 | \$0 | \$0 |
| Resilient Distribution Systems | \$50 | \$0 | \$0 |
| Transformer Resilience and Advanced Components | \$101 | \$0 | \$0 |
| Program Direction | \$25 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$226 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$226 | \$0 | \$0 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Geothermal Technologies | \$258 | \$258 | \$237 |
| Solar Energy | \$3,566 | \$0 | \$0 |
| Vehicle Technologies | \$142 | \$142 | \$100 |
| Building Technologies | \$2,048 | \$2,034 | \$0 |
| Federal Energy Management Program | \$204 | \$204 | \$0 |
| Advanced Manufacturing | \$4,727 | \$4,727 | \$0 |
| Bioenergy Technologies | \$236 | \$236 | \$0 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$11,181 | \$7,601 | \$337 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$11,181 | \$7,601 | \$337 |
| Science | | | |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$3,176 | \$0 | \$0 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$3,478 | \$1,968 | \$1,043 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$574 | \$50 | \$544 |
| High Energy Physics | | | |
| High Energy Physics | \$0 | \$1,523 | \$0 |
| Nuclear Physics | | | |
| Nuclear Physics | \$927 | \$467 | \$353 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$9,663 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$1,000 | \$0 | \$0 |
| Safeguards and Security | | | |
| Safeguards and Security | \$1,925 | \$1,885 | \$1,892 |
| <hr/> | | | |
| <i>Total Science</i> | \$20,743 | \$5,893 | \$3,832 |
| Weapons Activities | | | |
| Science | | | |
| Science Campaign | \$200 | \$199 | \$5,100 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$210 | \$209 | \$0 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 69 of 128

| Oak Ridge Institute for Science & Education | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <i>Total Weapons Activities</i> | \$410 | \$408 | \$5,100 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$1,305 | \$1,305 | \$1,305 |
| <i>Total Other Defense Activities</i> | \$1,305 | \$1,305 | \$1,305 |
| Defense Nuclear Nonproliferation | | | |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$4,184 | \$4,156 | \$3,500 |
| Global Material Security | | | |
| Global Material Security | \$200 | \$200 | \$200 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$4,384 | \$4,356 | \$3,700 |
| <i>Total Oak Ridge Institute for Science & Education</i> | \$38,249 | \$19,563 | \$14,274 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 70 of 128

| Oak Ridge National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$4,147 | \$2,250 | \$1,589 |
| Resilient Distribution Systems | \$4,687 | \$2,789 | \$900 |
| Cybersecurity for Energy Delivery Systems | \$7,110 | \$1,450 | \$0 |
| Energy Storage | \$5,034 | \$2,430 | \$600 |
| Transformer Resilience and Advanced Components | \$3,615 | \$0 | \$1,500 |
| Transmission Permitting and Technical Assistance | \$205 | \$143 | \$150 |
| Infrastructure Security & Energy Restoration | \$1,200 | \$1,200 | \$0 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$25,998 | \$10,262 | \$4,739 |
| <hr/> | | | |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$25,998 | \$10,262 | \$4,739 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$4,000 |
| CEDS | \$0 | \$0 | \$3,250 |
| <hr/> | | | |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$7,250 |
| <hr/> | | | |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$7,250 |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$27,265 | \$19,203 | \$4,593 |
| Radiological Facilities Management | | | |
| Radiological Facilities Management | \$9,969 | \$9,796 | \$0 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$30,314 | \$23,688 | \$10,735 |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$15,005 | \$18,503 | \$12,800 |
| International Nuclear Energy Cooperation | | | |
| International Nuclear Energy Cooperation | \$271 | \$250 | \$280 |
| <hr/> | | | |
| <i>Total Nuclear Energy</i> | \$82,824 | \$71,440 | \$28,408 |
| <hr/> | | | |
| Energy Efficiency and Renewable Energy | | | |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 71 of 128

| Oak Ridge National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Energy Efficiency and Renewable Energy | | | |
| Wind Energy | \$398 | \$398 | \$110 |
| Geothermal Technologies | \$463 | \$463 | \$407 |
| Hydrogen & Fuel Cell Technologies | \$4,371 | \$1,025 | \$1,425 |
| Water Power | \$4,465 | \$3,638 | \$4,657 |
| Solar Energy | \$1,154 | \$1,498 | \$0 |
| Vehicle Technologies | \$40,325 | \$40,325 | \$10,800 |
| Building Technologies | \$25,734 | \$25,559 | \$5,971 |
| Federal Energy Management Program | \$4,159 | \$4,159 | \$1,308 |
| Weatherization | \$332 | \$332 | \$0 |
| State Energy Program Grants | \$170 | \$170 | \$0 |
| Advanced Manufacturing | \$29,045 | \$29,045 | \$11,000 |
| Strategic Programs | \$75 | \$75 | \$0 |
| Bioenergy Technologies | \$15,177 | \$15,177 | \$4,365 |
| <i>Total Energy Efficiency and Renewable Energy</i> | <i>\$125,868</i> | <i>\$121,864</i> | <i>\$40,043</i> |
| <i>Total Energy Efficiency and Renewable Energy</i> | <i>\$125,868</i> | <i>\$121,864</i> | <i>\$40,043</i> |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$1,130 |
| <i>Total Nuclear Waste Disposal</i> | <i>\$0</i> | <i>\$0</i> | <i>\$1,130</i> |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$278,220 | \$286,935 | \$442,747 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$332,146 | \$317,176 | \$321,062 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$78,371 | \$69,500 | \$61,637 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$61,845 | \$61,563 | \$94,793 |
| High Energy Physics | | | |
| High Energy Physics | \$0 | \$500 | \$0 |
| Nuclear Physics | | | |
| Nuclear Physics | \$14,356 | \$16,751 | \$19,223 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$26,000 | \$25,823 | \$10,000 |
| Safeguards and Security | | | |
| Safeguards and Security | \$12,374 | \$13,064 | \$12,864 |
| <i>Total Science</i> | <i>\$803,312</i> | <i>\$791,312</i> | <i>\$962,326</i> |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$40,354 | \$40,080 | \$17,841 |
| Science | | | |
| Science Campaign | \$163 | \$162 | \$0 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 72 of 128

| Oak Ridge National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$181 | \$180 | \$180 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$12,402 | \$12,318 | \$4,310 |
| <i>Total Weapons Activities</i> | \$53,100 | \$52,740 | \$22,331 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$1,035 | \$1,035 | \$1,035 |
| <i>Total Other Defense Activities</i> | \$1,035 | \$1,035 | \$1,035 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$24,908 | \$24,739 | \$26,579 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$3,569 | \$3,545 | \$5,000 |
| Global Material Security | | | |
| Global Material Security | \$37,381 | \$37,127 | \$18,553 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$12,186 | \$12,103 | \$11,664 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$20,672 | \$20,532 | \$19,393 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$98,716 | \$98,046 | \$81,189 |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Capture | \$500 | \$497 | \$0 |
| Carbon Storage | \$633 | \$629 | \$0 |
| Advanced Energy Systems | \$1,300 | \$1,291 | \$0 |
| Cross Cutting Research | \$4,139 | \$4,111 | \$0 |
| <i>Total CCS and Power Systems</i> | \$6,572 | \$6,528 | \$0 |
| Advanced Coal Energy Systems and CCUS | | | |
| Advanced Energy Systems | \$0 | \$0 | \$1,705 |
| Carbon Capture Utilization and Storage | \$0 | \$0 | \$750 |
| <i>Total Advanced Coal Energy Systems and CCUS</i> | \$0 | \$0 | \$2,455 |
| <i>Total Fossil Energy Research and Development</i> | \$6,572 | \$6,528 | \$2,455 |
| Defense Environmental Cleanup | | | |
| Oak Ridge Reservation | | | |
| Nuclear Facility D & D, ORNL | \$70,100 | \$69,624 | \$60,007 |
| U233 Disposition Program | \$43,311 | \$43,017 | \$45,000 |
| <i>Total Oak Ridge Reservation</i> | \$113,411 | \$112,641 | \$105,007 |
| <i>Total Defense Environmental Cleanup</i> | \$113,411 | \$112,641 | \$105,007 |
| Strategic Petroleum Reserve | | | |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 73 of 128

| Oak Ridge National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| SPR Econometric Modelling Support | | | |
| Management | \$489 | \$486 | \$570 |
| <i>Total Strategic Petroleum Reserve</i> | \$489 | \$486 | \$570 |
| <i>Total Oak Ridge National Laboratory</i> | \$1,311,325 | \$1,266,354 | \$1,256,483 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 74 of 128

| Oak Ridge National Laboratory Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$6,186 | \$5,766 | \$5,465 |
| <i>Total Science</i> | \$6,186 | \$5,766 | \$5,465 |
| <i>Total Oak Ridge National Laboratory Site Office</i> | \$6,186 | \$5,766 | \$5,465 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 75 of 128

| Oak Ridge Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$0 | \$272 | \$40 |
| Program Direction-NE | | | |
| Program Direction-NE | \$645 | \$667 | \$667 |
| <hr/> | | | |
| <i>Total Nuclear Energy</i> | \$645 | \$939 | \$707 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Hydrogen & Fuel Cell Technologies | \$589 | \$130 | \$130 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$589 | \$130 | \$130 |
| Science | | | |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$85 | \$85 | \$0 |
| Nuclear Physics | | | |
| Nuclear Physics | \$108 | \$4 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$6,182 | \$6,140 | \$6,434 |
| Safeguards and Security | | | |
| Safeguards and Security | \$21,740 | \$19,701 | \$22,227 |
| Program Direction | | | |
| Program Direction | \$23,639 | \$23,367 | \$24,011 |
| <hr/> | | | |
| <i>Total Science</i> | \$51,754 | \$49,297 | \$52,672 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$2,795 | \$2,795 | \$2,795 |
| <hr/> | | | |
| <i>Total Other Defense Activities</i> | \$2,795 | \$2,795 | \$2,795 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$9,025 | \$8,964 | \$9,025 |
| Chief Financial Officer | | | |
| Program Direction | \$1,484 | \$1,484 | \$1,484 |
| <hr/> | | | |
| <i>Total Departmental Administration</i> | \$10,509 | \$10,448 | \$10,509 |
| Defense Environmental Cleanup | | | |
| Oak Ridge Reservation | | | |
| Nuclear Facility D & D, Y-12 | \$11,100 | \$11,024 | \$16,274 |
| Program Direction | | | |
| Oak Ridge | \$14,554 | \$14,576 | \$15,314 |
| <hr/> | | | |
| <i>Total Defense Environmental Cleanup</i> | \$25,654 | \$25,600 | \$31,588 |
| <hr/> | | | |
| <i>Total Oak Ridge Office</i> | \$91,946 | \$89,209 | \$98,401 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 76 of 128

| Oak Ridge Reservation | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Defense Environmental Cleanup | | | |
| Oak Ridge Reservation | | | |
| Clean-up and Disposition | \$68,457 | \$67,992 | \$67,000 |
| <i>Total Defense Environmental Cleanup</i> | \$68,457 | \$67,992 | \$67,000 |
| <i>Total Oak Ridge Reservation</i> | \$68,457 | \$67,992 | \$67,000 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 77 of 128

| Oak Ridge Reservation (Off-Site) | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Defense Environmental Cleanup | | | |
| Oak Ridge Reservation | | | |
| ORR Community and Regulatory Support | \$5,500 | \$5,462 | \$4,711 |
| <i>Total Defense Environmental Cleanup</i> | \$5,500 | \$5,462 | \$4,711 |
| <i>Total Oak Ridge Reservation (Off-Site)</i> | \$5,500 | \$5,462 | \$4,711 |

Department Of Energy
 FY 2019 Congressional Budget

2/23/2018
 2:02:34PM
 Page 78 of 128

Laboratory Table
 (Dollars In Thousands)

| Office of River Protection | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Defense Environmental Cleanup | | | |
| Office of River Protection | | | |
| Tank Farm Activities | \$733,965 | \$728,981 | \$677,460 |
| Waste Treatment Plant | \$693,000 | \$688,294 | \$705,000 |
| <i>Total Office of River Protection</i> | \$1,426,965 | \$1,417,275 | \$1,382,460 |
| Program Direction | | | |
| Office of River Protection | \$31,395 | \$31,320 | \$32,481 |
| <i>Total Defense Environmental Cleanup</i> | \$1,458,360 | \$1,448,595 | \$1,414,941 |
| <i>Total Office of River Protection</i> | \$1,458,360 | \$1,448,595 | \$1,414,941 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 79 of 128

| Office of Scientific & Technical Information | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Solar Energy | \$24 | \$0 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$24 | \$0 | \$0 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$214 | \$148 | \$0 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$569 | \$148 | \$0 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$190 | \$0 | \$148 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$145 | \$0 | \$145 |
| Nuclear Physics | | | |
| Nuclear Physics | \$334 | \$211 | \$108 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$80 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$200 | \$0 | \$0 |
| Safeguards and Security | | | |
| Safeguards and Security | \$784 | \$759 | \$759 |
| Program Direction | | | |
| Program Direction | \$8,557 | \$8,850 | \$8,647 |
| <i>Total Science</i> | \$11,073 | \$10,116 | \$9,807 |
| Weapons Activities | | | |
| Science | | | |
| Science Campaign | \$220 | \$219 | \$220 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$213 | \$212 | \$213 |
| <i>Total Weapons Activities</i> | \$433 | \$431 | \$433 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$300 | \$300 | \$300 |
| <i>Total Other Defense Activities</i> | \$300 | \$300 | \$300 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$28 | \$28 | \$32 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$28 | \$28 | \$32 |
| <i>Total Office of Scientific & Technical Information</i> | \$11,858 | \$10,875 | \$10,572 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 80 of 128

| Ohio Field Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$5 | \$5 | \$5 |
| <i>Total Other Defense Activities</i> | \$5 | \$5 | \$5 |
| <i>Total Ohio Field Office</i> | \$5 | \$5 | \$5 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 81 of 128

| Pacific Northwest National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| <i>Electricity Delivery and Energy Reliability</i> | | | |
| Transmission Reliability | \$8,419 | \$5,314 | \$4,716 |
| Resilient Distribution Systems | \$14,992 | \$13,571 | \$5,160 |
| Cybersecurity for Energy Delivery Systems | \$13,071 | \$4,900 | \$0 |
| Energy Storage | \$7,462 | \$11,032 | \$3,400 |
| Transformer Resilience and Advanced Components | \$570 | \$0 | \$0 |
| Transmission Permitting and Technical Assistance | \$472 | \$323 | \$250 |
| Infrastructure Security & Energy Restoration | \$703 | \$703 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | <u>\$45,689</u> | <u>\$35,843</u> | <u>\$13,526</u> |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$45,689 | \$35,843 | \$13,526 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| <i>Cybersecurity, Energy Security, and Emergency Resp</i> | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$2,000 |
| CEDS | \$0 | \$0 | \$6,687 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | <u>\$0</u> | <u>\$0</u> | <u>\$8,687</u> |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$8,687 |
| Nuclear Energy | | | |
| <i>Fuel Cycle R & D</i> | | | |
| Fuel Cycle R & D | \$12,178 | \$12,902 | \$1,652 |
| <i>Nuclear Energy Enabling Technologies</i> | | | |
| Nuclear Energy Enabling Technologies | \$1,586 | \$575 | \$605 |
| <i>Reactors Concepts RD&D</i> | | | |
| Reactors Concepts RD&D | \$1,370 | \$1,040 | \$900 |
| <i>International Nuclear Energy Cooperation</i> | | | |
| International Nuclear Energy Cooperation | \$0 | \$20 | \$0 |
| <i>Total Nuclear Energy</i> | <u>\$15,134</u> | <u>\$14,537</u> | <u>\$3,157</u> |
| <i>Total Nuclear Energy</i> | \$15,134 | \$14,537 | \$3,157 |
| Energy Efficiency and Renewable Energy | | | |
| <i>Energy Efficiency and Renewable Energy</i> | | | |
| Wind Energy | \$2,928 | \$2,928 | \$1,422 |
| Geothermal Technologies | \$2,964 | \$2,964 | \$1,062 |
| Hydrogen & Fuel Cell Technologies | \$6,938 | \$1,740 | \$2,440 |
| Water Power | \$8,114 | \$7,086 | \$3,772 |
| Solar Energy | \$3,863 | \$900 | \$0 |
| Vehicle Technologies | \$15,779 | \$15,779 | \$5,925 |
| Building Technologies | \$34,179 | \$33,947 | \$4,653 |
| Federal Energy Management Program | \$2,797 | \$2,797 | \$1,445 |
| Strategic Programs | \$265 | \$450 | \$0 |
| Bioenergy Technologies | \$24,044 | \$24,044 | \$3,803 |
| <i>Total Energy Efficiency and Renewable Energy</i> | <u>\$101,871</u> | <u>\$92,635</u> | <u>\$24,522</u> |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$101,871 | \$92,635 | \$24,522 |
| Nuclear Waste Disposal | | | |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 82 of 128

| Pacific Northwest National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$910 |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$910 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$1,483 | \$2,981 | \$1,162 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$31,527 | \$20,926 | \$27,137 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$110,179 | \$95,028 | \$90,987 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$663 | \$863 | \$1,400 |
| High Energy Physics | | | |
| High Energy Physics | \$3,375 | \$2,725 | \$1,465 |
| Nuclear Physics | | | |
| Nuclear Physics | \$520 | \$500 | \$500 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$1,076 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$0 | \$0 | \$4,000 |
| Safeguards and Security | | | |
| Safeguards and Security | \$12,839 | \$12,392 | \$12,349 |
| <i>Total Science</i> | \$161,662 | \$135,415 | \$139,000 |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$32,836 | \$32,613 | \$34,970 |
| Science | | | |
| Science Campaign | \$650 | \$646 | \$0 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$6,757 | \$6,711 | \$6,275 |
| <i>Total Weapons Activities</i> | \$40,243 | \$39,970 | \$41,245 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$1,905 | \$1,905 | \$1,905 |
| Enterprise Assessments | | | |
| Enterprise Assessments | \$160 | \$0 | \$0 |
| <i>Total Enterprise Assessments</i> | \$160 | \$0 | \$0 |
| <i>Total Other Defense Activities</i> | \$2,065 | \$1,905 | \$1,905 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$50,574 | \$50,231 | \$30,718 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 83 of 128

| Pacific Northwest National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$3,972 | \$3,945 | \$5,326 |
| Global Material Security | | | |
| Global Material Security | \$127,373 | \$126,508 | \$112,002 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$7,609 | \$7,557 | \$41,347 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$21,823 | \$21,675 | \$21,000 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$211,351 | \$209,916 | \$210,393 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$10,325 | \$10,255 | \$10,325 |
| <i>Total Departmental Administration</i> | \$10,325 | \$10,255 | \$10,325 |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Capture | \$3,319 | \$3,296 | \$0 |
| Cross Cutting Research | \$400 | \$397 | \$0 |
| <i>Total CCS and Power Systems</i> | \$3,719 | \$3,693 | \$0 |
| Advanced Coal Energy Systems and CCUS | | | |
| Advanced Energy Systems | \$0 | \$0 | \$175 |
| Carbon Capture Utilization and Storage | \$0 | \$0 | \$1,900 |
| <i>Total Advanced Coal Energy Systems and CCUS</i> | \$0 | \$0 | \$2,075 |
| Natural Gas Technologies | | | |
| Natural Gas Technologies | \$100 | \$99 | \$0 |
| <i>Total Fossil Energy Research and Development</i> | \$3,819 | \$3,792 | \$2,075 |
| <i>Total Pacific Northwest National Laboratory</i> | \$592,159 | \$544,268 | \$455,745 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 84 of 128

| Pacific Northwest Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$5,105 | \$4,894 | \$5,170 |
| <i>Total Science</i> | \$5,105 | \$4,894 | \$5,170 |
| <i>Total Pacific Northwest Site Office</i> | \$5,105 | \$4,894 | \$5,170 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 85 of 128

| Paducah Gaseous Diffusion Plant | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Non-Defense Environmental Cleanup | | | |
| Gaseous Diffusion Plants | | | |
| Gaseous Diffusion Plants | \$50,345 | \$50,003 | \$49,964 |
| <i>Total Non-Defense Environmental Cleanup</i> | \$50,345 | \$50,003 | \$49,964 |
| <hr/> | | | |
| Uranium Enrichment Decon. & Decom. Fund | | | |
| Uranium Enrichment D&D Fund | | | |
| Pens & Comm & Reg Support Paducah | \$2,386 | \$2,370 | \$2,102 |
| Paducah Gaseous Diffusion Plant | \$205,530 | \$204,135 | \$202,581 |
| <i>Total Uranium Enrichment D&D Fund</i> | \$207,916 | \$206,505 | \$204,683 |
| <i>Total Uranium Enrichment Decon. & Decom. Fund</i> | \$207,916 | \$206,505 | \$204,683 |
| <hr/> | | | |
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$3,000 | \$3,000 | \$3,000 |
| <i>Total Other Defense Activities</i> | \$3,000 | \$3,000 | \$3,000 |
| <hr/> | | | |
| Defense Environmental Cleanup | | | |
| Program Direction | | | |
| Paducah/Portsmouth | \$13,039 | \$13,136 | \$13,750 |
| Safeguards and Security | | | |
| Paducah | \$14,049 | \$13,954 | \$15,577 |
| <i>Total Defense Environmental Cleanup</i> | \$27,088 | \$27,090 | \$29,327 |
| <hr/> | | | |
| <i>Total Paducah Gaseous Diffusion Plant</i> | \$288,349 | \$286,598 | \$286,974 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 86 of 128

| Pantex Plant | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$389,675 | \$387,029 | \$435,558 |
| Science | | | |
| Science Campaign | \$320 | \$318 | \$0 |
| Engineering | | | |
| Engineering Campaign | \$2,068 | \$2,054 | \$2,420 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$136,750 | \$135,821 | \$140,638 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$7,163 | \$7,114 | \$6,765 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$199,087 | \$197,735 | \$217,385 |
| Secure Transportation Asset | | | |
| Secure Transportation Asset | \$7,091 | \$7,043 | \$8,112 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$4,069 | \$4,041 | \$3,500 |
| Total Weapons Activities | \$746,223 | \$741,155 | \$814,378 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$10 | \$10 | \$10 |
| Total Other Defense Activities | \$10 | \$10 | \$10 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$2,000 | \$1,986 | \$2,000 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$1,441 | \$1,431 | \$1,529 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$4,033 | \$4,006 | \$7,000 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$630 | \$626 | \$135 |
| Total Defense Nuclear Nonproliferation | \$8,104 | \$8,049 | \$10,664 |
| Total Pantex Plant | \$754,337 | \$749,214 | \$825,052 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 87 of 128

| Pinellas Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---------------------------------------|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$7,310 | \$5,700 | \$5,545 |
| <i>Total Other Defense Activities</i> | \$7,310 | \$5,700 | \$5,545 |
| <i>Total Pinellas Site</i> | \$7,310 | \$5,700 | \$5,545 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 88 of 128

| Portsmouth Gaseous Diffusion Plant | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Non-Defense Environmental Cleanup | | | |
| Gaseous Diffusion Plants | | | |
| Gaseous Diffusion Plants | \$50,959 | \$50,613 | \$50,611 |
| <i>Total Non-Defense Environmental Cleanup</i> | \$50,959 | \$50,613 | \$50,611 |
| <hr/> | | | |
| Uranium Enrichment Decon. & Decom. Fund | | | |
| Uranium Enrichment D&D Fund | | | |
| Pens & Comm & Reg Support Portsmouth | \$1,795 | \$1,783 | \$1,670 |
| Portsmouth Gaseous Diffusion Plant | \$315,168 | \$313,028 | \$348,099 |
| <i>Total Uranium Enrichment D&D Fund</i> | \$316,963 | \$314,811 | \$349,769 |
| <i>Total Uranium Enrichment Decon. & Decom. Fund</i> | \$316,963 | \$314,811 | \$349,769 |
| <hr/> | | | |
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$4,200 | \$3,000 | \$3,000 |
| <i>Total Other Defense Activities</i> | \$4,200 | \$3,000 | \$3,000 |
| <hr/> | | | |
| Defense Environmental Cleanup | | | |
| Safeguards and Security | | | |
| Portsmouth | \$14,049 | \$13,954 | \$15,078 |
| <i>Total Defense Environmental Cleanup</i> | \$14,049 | \$13,954 | \$15,078 |
| <hr/> | | | |
| <i>Total Portsmouth Gaseous Diffusion Plant</i> | \$386,171 | \$382,378 | \$418,458 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 89 of 128

| Princeton Plasma Physics Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <i>Science</i> | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$0 | \$385 | \$385 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$1,300 | \$0 | \$0 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$76,000 | \$57,151 | \$73,591 |
| High Energy Physics | | | |
| High Energy Physics | \$200 | \$0 | \$0 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$360 | \$0 | \$0 |
| Safeguards and Security | | | |
| Safeguards and Security | \$2,535 | \$2,691 | \$2,732 |
| <i>Total Science</i> | \$80,395 | \$60,227 | \$76,708 |
| <i>Defense Nuclear Nonproliferation</i> | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$100 | \$99 | \$113 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$100 | \$99 | \$113 |
| <i>Total Princeton Plasma Physics Laboratory</i> | \$80,495 | \$60,326 | \$76,821 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 90 of 128

| Princeton Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|------------------------------------|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$1,647 | \$1,794 | \$1,978 |
| <i>Total Science</i> | \$1,647 | \$1,794 | \$1,978 |
| <i>Total Princeton Site Office</i> | \$1,647 | \$1,794 | \$1,978 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 91 of 128

| Richland Operations Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Infrastructure Security & Energy Restoration | \$856 | \$856 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$856 | \$856 | \$0 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$850 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$850 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$1,000 | \$1,000 | \$1,000 |
| <i>Total Other Defense Activities</i> | \$1,000 | \$1,000 | \$1,000 |
| Defense Nuclear Nonproliferation | | | |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$6,984 | \$6,937 | \$1,800 |
| <i>Total Defense Nuclear Nonproliferation</i> | \$6,984 | \$6,937 | \$1,800 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$100 | \$99 | \$100 |
| <i>Total Departmental Administration</i> | \$100 | \$99 | \$100 |
| Defense Environmental Cleanup | | | |
| Hanford Site | | | |
| Community and Regulatory Support | \$24,701 | \$24,533 | \$5,121 |
| Office of River Protection | | | |
| Tank Farm Activities | \$73,000 | \$72,504 | \$56,053 |
| Program Direction | | | |
| Richland | \$40,664 | \$39,816 | \$41,207 |
| <i>Total Defense Environmental Cleanup</i> | \$138,365 | \$136,853 | \$102,381 |
| <i>Total Richland Operations Office</i> | \$147,305 | \$145,745 | \$106,131 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 92 of 128

| Rocky Flats Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$38,029 | \$37,137 | \$34,346 |
| <i>Total Other Defense Activities</i> | \$38,029 | \$37,137 | \$34,346 |
| Defense Environmental Cleanup | | | |
| Closure Sites | | | |
| Rocky Flats | \$8,389 | \$8,332 | \$2,000 |
| <i>Total Defense Environmental Cleanup</i> | \$8,389 | \$8,332 | \$2,000 |
| <i>Total Rocky Flats Site</i> | \$46,418 | \$45,469 | \$36,346 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 93 of 128

| Sandia National Laboratories | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| <i>Electricity Delivery and Energy Reliability</i> | | | |
| Transmission Reliability | \$1,574 | \$2,400 | \$1,469 |
| Resilient Distribution Systems | \$2,073 | \$2,288 | \$500 |
| Cybersecurity for Energy Delivery Systems | \$2,148 | \$1,900 | \$0 |
| Energy Storage | \$9,486 | \$13,770 | \$4,000 |
| Transformer Resilience and Advanced Components | \$90 | \$0 | \$500 |
| Transmission Permitting and Technical Assistance | \$231 | \$185 | \$150 |
| Infrastructure Security & Energy Restoration | \$349 | \$349 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$15,951 | \$20,892 | \$6,619 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$15,951 | \$20,892 | \$6,619 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| <i>Cybersecurity, Energy Security, and Emergency Resp</i> | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$1,000 |
| CEDS | \$0 | \$0 | \$3,900 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$4,900 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$4,900 |
| Nuclear Energy | | | |
| <i>Fuel Cycle R & D</i> | | | |
| Fuel Cycle R & D | \$19,100 | \$23,360 | \$2,790 |
| <i>Nuclear Energy Enabling Technologies</i> | | | |
| Nuclear Energy Enabling Technologies | \$988 | \$2,100 | \$150 |
| <i>Reactors Concepts RD&D</i> | | | |
| Reactors Concepts RD&D | \$2,171 | \$3,894 | \$3,000 |
| <i>International Nuclear Energy Cooperation</i> | | | |
| International Nuclear Energy Cooperation | \$0 | \$45 | \$0 |
| <i>Supercritical Transformational Electric Power Generation</i> | | | |
| Supercritical Transformational Electric Power Generation | \$4,721 | \$4,750 | \$0 |
| <i>Total Nuclear Energy</i> | \$26,980 | \$34,149 | \$5,940 |
| Energy Efficiency and Renewable Energy | | | |
| <i>Energy Efficiency and Renewable Energy</i> | | | |
| Wind Energy | \$4,825 | \$4,825 | \$3,547 |
| Geothermal Technologies | \$5,873 | \$5,873 | \$1,318 |
| Hydrogen & Fuel Cell Technologies | \$8,637 | \$2,790 | \$4,140 |
| Water Power | \$6,947 | \$6,947 | \$2,497 |
| Solar Energy | \$11,689 | \$4,000 | \$0 |
| Vehicle Technologies | \$12,004 | \$12,004 | \$4,912 |
| Building Technologies | \$274 | \$272 | \$82 |
| Strategic Programs | \$0 | \$500 | \$0 |
| Bioenergy Technologies | \$7,592 | \$7,592 | \$2,984 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$57,841 | \$44,803 | \$19,480 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$57,841 | \$44,803 | \$19,480 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 94 of 128

| Sandia National Laboratories | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$35,480 |
| <hr/> | | | |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$35,480 |
| | | | |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$2,829 | \$9,579 | \$7,604 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$33,577 | \$24,038 | \$26,532 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$13,522 | \$9,306 | \$10,100 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$2,952 | \$2,741 | \$2,238 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$100 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Science</i> | \$52,980 | \$45,664 | \$46,474 |
| | | | |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$899,151 | \$893,045 | \$1,189,758 |
| Science | | | |
| Science Campaign | \$43,697 | \$43,400 | \$55,032 |
| Engineering | | | |
| Engineering Campaign | \$67,036 | \$66,581 | \$82,728 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$47,378 | \$47,056 | \$63,089 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$151,857 | \$150,826 | \$172,007 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$78,586 | \$78,052 | \$66,721 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$19,720 | \$19,586 | \$16,707 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$201,773 | \$200,403 | \$207,448 |
| Secure Transportation Asset | | | |
| Secure Transportation Asset | \$41,457 | \$41,175 | \$61,928 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$8,326 | \$8,269 | \$8,112 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$1,558,981 | \$1,548,393 | \$1,923,530 |
| | | | |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$1,210 | \$1,210 | \$1,210 |
| <hr/> | | | |
| <i>Total Other Defense Activities</i> | \$1,210 | \$1,210 | \$1,210 |
| | | | |
| Defense Nuclear Nonproliferation | | | |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 95 of 128

| Sandia National Laboratories | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$103,168 | \$102,467 | \$107,374 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$35,853 | \$35,610 | \$46,200 |
| Global Material Security | | | |
| Global Material Security | \$47,284 | \$46,963 | \$45,179 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$2,010 | \$1,996 | \$1,982 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$7,375 | \$7,325 | \$7,053 |
| <i>Total Defense Nuclear Nonproliferation</i> | <i>\$195,690</i> | <i>\$194,361</i> | <i>\$207,788</i> |
| Departmental Administration | | | |
| Office of Indian Energy | | | |
| Office of Indian Energy | \$750 | \$700 | \$800 |
| <i>Total Departmental Administration</i> | <i>\$750</i> | <i>\$700</i> | <i>\$800</i> |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Storage | \$622 | \$618 | \$0 |
| Cross Cutting Research | \$285 | \$283 | \$0 |
| <i>Total CCS and Power Systems</i> | <i>\$907</i> | <i>\$901</i> | <i>\$0</i> |
| Natural Gas Technologies | | | |
| Natural Gas Technologies | \$1,210 | \$1,202 | \$0 |
| <i>Total Fossil Energy Research and Development</i> | <i>\$2,117</i> | <i>\$2,103</i> | <i>\$0</i> |
| Defense Environmental Cleanup | | | |
| NNSA Sites | | | |
| NNSA Sites | \$4,130 | \$4,102 | \$2,600 |
| <i>Total Defense Environmental Cleanup</i> | <i>\$4,130</i> | <i>\$4,102</i> | <i>\$2,600</i> |
| Strategic Petroleum Reserve | | | |
| SPR Geotechnical Analytical Support | | | |
| SPR - Facilities Development | \$3,490 | \$3,466 | \$3,220 |
| <i>Total Strategic Petroleum Reserve</i> | <i>\$3,490</i> | <i>\$3,466</i> | <i>\$3,220</i> |
| <i>Total Sandia National Laboratories</i> | <i>\$1,920,120</i> | <i>\$1,899,843</i> | <i>\$2,258,041</i> |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 96 of 128

| Sandia Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$20,353 | \$20,215 | \$22,992 |
| <i>Total Federal Salaries and Expenses</i> | \$20,353 | \$20,215 | \$22,992 |
| <i>Total Sandia Site Office</i> | \$20,353 | \$20,215 | \$22,992 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 97 of 128

| Savannah River National Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$4,346 | \$4,554 | \$261 |
| <i>Total Nuclear Energy</i> | \$4,346 | \$4,554 | \$261 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Hydrogen & Fuel Cell Technologies | \$2,615 | \$330 | \$580 |
| Solar Energy | \$287 | \$0 | \$0 |
| Vehicle Technologies | \$53 | \$53 | \$0 |
| Bioenergy Technologies | \$444 | \$444 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$3,399 | \$827 | \$580 |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$3,399 | \$827 | \$580 |
| Science | | | |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$827 | \$0 | \$0 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$50 | \$50 | \$0 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$0 | \$50 | \$0 |
| <i>Total Science</i> | \$877 | \$100 | \$0 |
| <i>Total Savannah River National Laboratory</i> | \$8,622 | \$5,481 | \$841 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 98 of 128

| Savannah River Operations Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Resilient Distribution Systems | \$24 | \$0 | \$0 |
| Transformer Resilience and Advanced Components | \$50 | \$0 | \$250 |
| Infrastructure Security & Energy Restoration | \$300 | \$300 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$374 | \$300 | \$250 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$374 | \$300 | \$250 |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$500 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | \$0 | \$0 | \$500 |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$1,050 |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$1,050 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$500 | \$500 | \$500 |
| <i>Total Other Defense Activities</i> | \$500 | \$500 | \$500 |
| Departmental Administration | | | |
| Strategic Partnership Projects | | | |
| Strategic Partnership Projects | \$6,700 | \$6,654 | \$6,700 |
| <i>Total Departmental Administration</i> | \$6,700 | \$6,654 | \$6,700 |
| Defense Environmental Cleanup | | | |
| Savannah River Sites | | | |
| Community and Regulatory Support | \$11,249 | \$11,172 | \$4,749 |
| Program Direction | | | |
| Savannah River | \$43,137 | \$45,477 | \$47,001 |
| Safeguards and Security | | | |
| Savannah River Site | \$136,000 | \$135,076 | \$183,357 |
| <i>Total Defense Environmental Cleanup</i> | \$190,386 | \$191,725 | \$235,107 |
| <i>Total Savannah River Operations Office</i> | \$197,960 | \$199,179 | \$244,107 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 99 of 128

| Savannah River Site | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$99,691 | \$99,014 | \$132,498 |
| Science | | | |
| Science Campaign | \$300 | \$298 | \$0 |
| Engineering | | | |
| Engineering Campaign | \$1,618 | \$1,607 | \$1,835 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$6,967 | \$6,920 | \$7,183 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$5,578 | \$5,540 | \$5,554 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$135,453 | \$134,533 | \$174,940 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$8,042 | \$7,987 | \$6,515 |
| Total Weapons Activities | \$257,649 | \$255,899 | \$328,525 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$6,120 | \$6,078 | \$7,004 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$2,304 | \$2,288 | \$2,800 |
| Global Material Security | | | |
| Global Material Security | \$168 | \$167 | \$169 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$62,894 | \$62,467 | \$84,141 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$3,550 | \$3,526 | \$3,995 |
| Nonproliferation Construction | | | |
| Nonproliferation Construction | \$328,939 | \$326,705 | \$228,000 |
| Total Defense Nuclear Nonproliferation | \$403,975 | \$401,231 | \$326,109 |
| Defense Environmental Cleanup | | | |
| Savannah River Sites | | | |
| Site Risk Management Operations | \$448,980 | \$445,931 | \$0 |
| Radioactive Liquid Tank Waste Stabilization and Disposition | \$773,200 | \$767,950 | \$949,379 |
| Nuclear Material Management | \$0 | \$0 | \$351,331 |
| Environmental Cleanup | \$0 | \$0 | \$167,364 |
| Total Savannah River Sites | \$1,222,180 | \$1,213,881 | \$1,468,074 |
| Total Defense Environmental Cleanup | \$1,222,180 | \$1,213,881 | \$1,468,074 |
| Total Savannah River Site | \$1,883,804 | \$1,871,011 | \$2,122,708 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 100 of 128

| Savannah River Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$10 | \$10 | \$10 |
| <hr/> | | | |
| <i>Total Other Defense Activities</i> | \$10 | \$10 | \$10 |
| | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$5,268 | \$5,232 | \$5,767 |
| <hr/> | | | |
| <i>Total Federal Salaries and Expenses</i> | \$5,268 | \$5,232 | \$5,767 |
| <hr/> | | | |
| <i>Total Savannah River Site Office</i> | \$5,278 | \$5,242 | \$5,777 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 101 of 128

| Separations Process Research Unit | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Defense Environmental Cleanup | | | |
| NNSA Sites | | | |
| NNSA Sites | \$3,685 | \$3,660 | \$15,000 |
| <i>Total Defense Environmental Cleanup</i> | \$3,685 | \$3,660 | \$15,000 |
| <i>Total Separations Process Research Unit</i> | \$3,685 | \$3,660 | \$15,000 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 102 of 128

| SLAC National Accelerator Laboratory | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Nuclear Energy | | | |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$50 | \$0 | \$0 |
| <hr/> | | | |
| <i>Total Nuclear Energy</i> | \$50 | \$0 | \$0 |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Hydrogen & Fuel Cell Technologies | \$95 | \$50 | \$50 |
| Solar Energy | \$3,830 | \$333 | \$0 |
| Vehicle Technologies | \$1,700 | \$1,700 | \$900 |
| Building Technologies | \$400 | \$397 | \$123 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$6,025 | \$2,480 | \$1,073 |
| <hr/> | | | |
| <i>Total Energy Efficiency and Renewable Energy</i> | \$6,025 | \$2,480 | \$1,073 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$125 | \$428 | \$420 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$401,195 | \$401,111 | \$361,600 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$4,211 | \$4,100 | \$3,100 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$4,450 | \$5,550 | \$4,542 |
| High Energy Physics | | | |
| High Energy Physics | \$100,733 | \$61,190 | \$44,788 |
| Nuclear Physics | | | |
| Nuclear Physics | \$1,089 | \$1,009 | \$810 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$429 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$30,000 | \$0 | \$0 |
| Safeguards and Security | | | |
| Safeguards and Security | \$4,255 | \$4,269 | \$4,304 |
| <hr/> | | | |
| <i>Total Science</i> | \$546,487 | \$477,657 | \$419,564 |
| Weapons Activities | | | |
| Science | | | |
| Science Campaign | \$90 | \$89 | \$90 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$90 | \$89 | \$90 |
| <hr/> | | | |
| <i>Total SLAC National Accelerator Laboratory</i> | \$552,652 | \$480,226 | \$420,727 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 103 of 128

| Southeastern Power Administration | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Southeastern Power Admin. - Operation & Maint. | | | |
| Purchase Power and Wheeling | | | |
| Purchase Power and Wheeling | \$78,929 | \$78,393 | \$73,184 |
| Program Direction | | | |
| Program Direction | \$6,000 | \$5,959 | \$6,500 |
| <hr/> | | | |
| <i>Total Southeastern Power Admin. - Operation & Maint.</i> | \$84,929 | \$84,352 | \$79,684 |
| <hr/> | | | |
| <i>Total Southeastern Power Administration</i> | \$84,929 | \$84,352 | \$79,684 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 104 of 128

| Southwestern Power Administration | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Southwestern Power Admin. - Operation & Maint. | | | |
| Systems Operation and Maintenance | | | |
| Systems Operation and Maintenance | \$13,896 | \$16,680 | \$17,006 |
| Purchase Power and Wheeling | | | |
| Purchase Power and Wheeling | \$83,000 | \$20,000 | \$93,000 |
| SWPA Construction | | | |
| Construction | \$12,486 | \$14,932 | \$16,875 |
| Program Direction | | | |
| Program Direction | \$31,516 | \$32,372 | \$32,995 |
| <hr/> | | | |
| <i>Total Southwestern Power Admin. - Operation & Maint.</i> | \$140,898 | \$83,984 | \$159,876 |
| <hr/> | | | |
| <i>Total Southwestern Power Administration</i> | \$140,898 | \$83,984 | \$159,876 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 105 of 128

| Stanford Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Resilient Distribution Systems | \$3,015 | \$0 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$3,015 | \$0 | \$0 |
| Science | | | |
| Program Direction | | | |
| Program Direction | \$2,442 | \$2,638 | \$2,623 |
| <i>Total Science</i> | \$2,442 | \$2,638 | \$2,623 |
| <i>Total Stanford Site Office</i> | \$5,457 | \$2,638 | \$2,623 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 106 of 128

| Strategic Petroleum Reserve - Bayou Choctaw | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Strategic Petroleum Reserve | | | |
| SPR Geotechnical Analytical Support | | | |
| SPR - Facilities Development | \$14,339 | \$14,241 | \$11,419 |
| <i>Total Strategic Petroleum Reserve</i> | \$14,339 | \$14,241 | \$11,419 |
| <i>Total Strategic Petroleum Reserve - Bayou Choctaw</i> | \$14,339 | \$14,241 | \$11,419 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 107 of 128

| Strategic Petroleum Reserve - Big Hill | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Strategic Petroleum Reserve | | | |
| SPR Geotechnical Analytical Support | | | |
| SPR - Facilities Development | \$25,538 | \$25,365 | \$23,601 |
| <i>Total Strategic Petroleum Reserve</i> | \$25,538 | \$25,365 | \$23,601 |
| <i>Total Strategic Petroleum Reserve - Big Hill</i> | \$25,538 | \$25,365 | \$23,601 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 108 of 128

| Strategic Petroleum Reserve - Bryan Mound | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Strategic Petroleum Reserve | | | |
| SPR Geotechnical Analytical Support | | | |
| SPR - Facilities Development | \$19,057 | \$18,928 | \$19,298 |
| <i>Total Strategic Petroleum Reserve</i> | \$19,057 | \$18,928 | \$19,298 |
| <i>Total Strategic Petroleum Reserve - Bryan Mound</i> | \$19,057 | \$18,928 | \$19,298 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 109 of 128

| Strategic Petroleum Reserve - West Hackberry | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Strategic Petroleum Reserve | | | |
| SPR Geotechnical Analytical Support | | | |
| SPR - Facilities Development | \$32,520 | \$32,299 | \$19,888 |
| <i>Total Strategic Petroleum Reserve</i> | \$32,520 | \$32,299 | \$19,888 |
| <i>Total Strategic Petroleum Reserve - West Hackberry</i> | \$32,520 | \$32,299 | \$19,888 |

Department Of Energy
FY 2019 Congressional Budget

2/23/2018
2:02:34PM
Page 110 of 128

Laboratory Table
(Dollars In Thousands)

| Strategic Petroleum Reserve Project Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Strategic Petroleum Reserve | | | |
| SPR Geotechnical Analytical Support | | | |
| SPR - Facilities Development | \$100,246 | \$99,565 | \$71,249 |
| SPR Econometric Modelling Support Management | \$18,354 | \$18,229 | \$16,974 |
| <i>Total Strategic Petroleum Reserve</i> | \$118,600 | \$117,794 | \$88,223 |
| <i>Total Strategic Petroleum Reserve Project Office</i> | \$118,600 | \$117,794 | \$88,223 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 111 of 128

| Thomas Jefferson National Accelerator Facility | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| <i>Science</i> | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$0 | \$273 | \$387 |
| High Energy Physics | | | |
| High Energy Physics | \$0 | \$25 | \$0 |
| Nuclear Physics | | | |
| Nuclear Physics | \$112,211 | \$108,244 | \$109,267 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$150 | \$0 | \$0 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$8,000 | \$0 | \$0 |
| Safeguards and Security | | | |
| Safeguards and Security | \$2,709 | \$2,728 | \$2,758 |
| <i>Total Science</i> | \$123,070 | \$111,270 | \$112,412 |
| <i>Total Thomas Jefferson National Accelerator Facility</i> | \$123,070 | \$111,270 | \$112,412 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 112 of 128

| Thomas Jefferson Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Science | | | |
| Program Direction | | | |
| Program Direction | \$1,905 | \$1,921 | \$2,088 |
| <i>Total Science</i> | \$1,905 | \$1,921 | \$2,088 |
| <i>Total Thomas Jefferson Site Office</i> | \$1,905 | \$1,921 | \$2,088 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 113 of 128

| Undesignated Lab/Plant/Installation | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Office of Technology Transitions | | | |
| Office of Technology Transitions | | | |
| Office of Technology Transitions | \$6,906 | \$6,859 | \$8,505 |
| <i>Total Office of Technology Transitions</i> | \$6,906 | \$6,859 | \$8,505 |
| Northeast Home Heating Oil Reserve Account | | | |
| Northeast Home Heating Oil Reserve | | | |
| Northeast Home Heating Oil Reserve | \$9,114 | \$9,076 | \$9,038 |
| <i>Total Northeast Home Heating Oil Reserve Account</i> | \$9,114 | \$9,076 | \$9,038 |
| <i>Total Undesignated Lab/Plant/Installation</i> | \$16,020 | \$15,935 | \$17,543 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 114 of 128

| University of Rochester | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <i>Weapons Activities</i> | | | |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$68,000 | \$67,538 | \$45,383 |
| <i>Total Weapons Activities</i> | \$68,000 | \$67,538 | \$45,383 |
| <i>Total University of Rochester</i> | \$68,000 | \$67,538 | \$45,383 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 115 of 128

| Washington Headquarters | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Innovative Tech Loan Guarantee Prog | | | |
| Administrative Operations | | | |
| Administrative Operations | \$37,000 | \$36,749 | \$10,000 |
| <i>Total Innovative Tech Loan Guarantee Prog</i> | <i>\$37,000</i> | <i>\$36,749</i> | <i>\$10,000</i> |
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Transmission Reliability | \$3,948 | \$7,392 | \$0 |
| Resilient Distribution Systems | \$3,779 | \$6,701 | \$480 |
| Cybersecurity for Energy Delivery Systems | \$2,858 | \$25,079 | \$0 |
| Energy Storage | \$5,596 | \$3,558 | \$0 |
| Transformer Resilience and Advanced Components | \$269 | \$1,114 | \$2,000 |
| Transmission Permitting and Technical Assistance | \$917 | \$2,132 | \$1,710 |
| Infrastructure Security & Energy Restoration | \$3,856 | \$3,795 | \$0 |
| Program Direction | \$21,989 | \$21,433 | \$14,621 |
| <i>Total Electricity Delivery and Energy Reliability</i> | <i>\$43,212</i> | <i>\$71,204</i> | <i>\$18,811</i> |
| <i>Total Electricity Delivery and Energy Reliability</i> | <i>\$43,212</i> | <i>\$71,204</i> | <i>\$18,811</i> |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Cybersecurity, Energy Security, and Emergency Resp | | | |
| Infrastructure Security and Energy Restoration (ISER) | \$0 | \$0 | \$6,050 |
| CEDS | \$0 | \$0 | \$5,500 |
| Program Direction | \$0 | \$0 | \$4,906 |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | <i>\$0</i> | <i>\$0</i> | <i>\$16,456</i> |
| <i>Total Cybersecurity, Energy Security, and Emergency Resp</i> | <i>\$0</i> | <i>\$0</i> | <i>\$16,456</i> |
| Nuclear Energy | | | |
| University Research Program | | | |
| University Research | \$16 | \$68 | \$0 |
| Fuel Cycle R & D | | | |
| Fuel Cycle R & D | \$15,986 | \$20,569 | \$4,192 |
| Radiological Facilities Management | | | |
| Radiological Facilities Management | \$54 | \$233 | \$25 |
| Idaho Facilities Management | | | |
| Idaho Facilities Management | \$1,248 | \$1,300 | \$1,300 |
| Idaho Sitewide Safeguards and Security | | | |
| Idaho Sitewide Safeguards and Security | \$422 | \$1,773 | \$512 |
| Program Direction-NE | | | |
| Program Direction-NE | \$43,697 | \$42,571 | \$32,131 |
| Nuclear Energy Enabling Technologies | | | |
| Nuclear Energy Enabling Technologies | \$7,675 | \$7,674 | \$7,047 |
| Reactors Concepts RD&D | | | |
| Reactors Concepts RD&D | \$10,241 | \$12,333 | \$8,535 |
| International Nuclear Energy Cooperation | | | |
| International Nuclear Energy Cooperation | \$129 | \$421 | \$412 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 116 of 128

| Washington Headquarters | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| SMR Licensing Technical Support | | | |
| SMR Licensing Technical Support | \$297 | \$1,192 | \$0 |
| Supercritical Transformational Electric Power Generation | | | |
| Supercritical Transformational Electric Power Generation | \$198 | \$216 | \$0 |
| <i>Total Nuclear Energy</i> | <i>\$79,963</i> | <i>\$88,350</i> | <i>\$54,154</i> |
| Energy Efficiency and Renewable Energy | | | |
| Energy Efficiency and Renewable Energy | | | |
| Wind Energy | \$8,053 | \$43,441 | \$6,567 |
| Program Direction | \$119,448 | \$118,406 | \$104,940 |
| Geothermal Technologies | \$4,290 | \$3,818 | \$2,479 |
| Hydrogen & Fuel Cell Technologies | \$5,585 | \$74,577 | \$13,262 |
| Water Power | \$5,591 | \$5,020 | \$12,737 |
| Solar Energy | \$95,391 | \$146,490 | \$39,500 |
| Vehicle Technologies | \$16,039 | \$13,954 | \$2,860 |
| Building Technologies | \$44,635 | \$44,333 | \$20,205 |
| Federal Energy Management Program | \$7,353 | \$7,170 | \$2,500 |
| Weatherization | \$225,655 | \$224,107 | \$0 |
| State Energy Program Grants | \$41,638 | \$41,298 | \$0 |
| Advanced Manufacturing | \$139,265 | \$137,516 | \$35,586 |
| Strategic Programs | \$7,106 | \$7,500 | \$0 |
| Bioenergy Technologies | \$14,750 | \$13,358 | \$0 |
| <i>Total Energy Efficiency and Renewable Energy</i> | <i>\$734,799</i> | <i>\$880,988</i> | <i>\$240,636</i> |
| <i>Total Energy Efficiency and Renewable Energy</i> | <i>\$734,799</i> | <i>\$880,988</i> | <i>\$240,636</i> |
| Advanced Researched Projects Agency-Energy | | | |
| Advanced Researched Projects Agency-Energy | | | |
| Projects | \$276,750 | \$274,871 | \$0 |
| Program Direction | \$29,250 | \$29,051 | \$0 |
| <i>Total Advanced Researched Projects Agency-Energy</i> | <i>\$306,000</i> | <i>\$303,922</i> | <i>\$0</i> |
| <i>Total Advanced Researched Projects Agency-Energy</i> | <i>\$306,000</i> | <i>\$303,922</i> | <i>\$0</i> |
| Tribal Indian Energy Loan Guarantee Program | | | |
| Tribal Indian Energy Loan Guarantee Program | | | |
| Administrative Operations | \$500 | \$497 | \$0 |
| Loan guarantee credit subsidy costs | \$8,500 | \$8,442 | \$0 |
| <i>Total Tribal Indian Energy Loan Guarantee Program</i> | <i>\$9,000</i> | <i>\$8,939</i> | <i>\$0</i> |
| <i>Total Tribal Indian Energy Loan Guarantee Program</i> | <i>\$9,000</i> | <i>\$8,939</i> | <i>\$0</i> |
| Advance Technology Vehicles Man Loan Program | | | |
| Energy Transformation Acceleration Fund | | | |
| Administrative Expenses | \$5,000 | \$4,966 | \$1,000 |
| <i>Total Advance Technology Vehicles Man Loan Program</i> | <i>\$5,000</i> | <i>\$4,966</i> | <i>\$1,000</i> |
| Uranium Enrichment Decon. & Decom. Fund | | | |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 117 of 128

| Washington Headquarters | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| U/TH Reimbursements | | | |
| U/TH Reimbursements | \$30,000 | \$29,796 | \$30,000 |
| <i>Total Uranium Enrichment Decon. & Decom. Fund</i> | \$30,000 | \$29,796 | \$30,000 |
| Nuclear Waste Disposal | | | |
| Yucca Mountain and Interim Storage | | | |
| Yucca Mountain and Interim Storage | \$0 | \$0 | \$35,264 |
| <i>Total Nuclear Waste Disposal</i> | \$0 | \$0 | \$35,264 |
| Science | | | |
| Advanced Scientific Computing Research | | | |
| Advanced Scientific Computing Research | \$94,972 | \$42,803 | \$114,755 |
| Basic Energy Sciences | | | |
| Basic Energy Sciences | \$120,188 | \$334,453 | \$143,436 |
| Biological and Environmental Research | | | |
| Biological and Environmental Research | \$37,909 | \$113,566 | \$53,020 |
| Fusion Energy Sciences | | | |
| Fusion Energy Sciences | \$65,528 | \$127,612 | \$53,545 |
| High Energy Physics | | | |
| High Energy Physics | \$59,415 | \$106,090 | \$77,626 |
| Nuclear Physics | | | |
| Nuclear Physics | \$49,352 | \$59,032 | \$64,632 |
| Workforce Development for Teachers and Scientists | | | |
| Workforce Development for Teachers and Scientists | \$0 | \$19,368 | \$19,000 |
| Science Laboratories Infrastructure | | | |
| Science Laboratories Infrastructure | \$0 | \$46,864 | \$0 |
| Safeguards and Security | | | |
| Safeguards and Security | \$8,504 | \$9,354 | \$10,479 |
| Program Direction | | | |
| Program Direction | \$90,978 | \$91,157 | \$90,113 |
| <i>Total Science</i> | \$526,846 | \$950,299 | \$626,606 |
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$81,035 | \$80,481 | \$286,959 |
| Science | | | |
| Science Campaign | \$23,263 | \$23,105 | \$40,735 |
| Engineering | | | |
| Engineering Campaign | \$2,044 | \$2,030 | \$6,351 |
| Inertial Confinement Fusion Ignition High Yield | | | |
| Inertial Confinement Fusion Ignition High Yield Campaign | \$9,873 | \$9,808 | \$8,121 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$11,497 | \$11,418 | \$120,908 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$37,075 | \$36,823 | \$31,731 |
| Legacy Contractor Pensions | | | |
| Legacy Contractor Pensions | \$248,492 | \$246,804 | \$162,292 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 118 of 128

| Washington Headquarters | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$90,068 | \$89,457 | \$142,464 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$29,498 | \$29,298 | \$156,616 |
| Secure Transportation Asset | | | |
| Secure Transportation Asset | \$97,118 | \$96,458 | \$102,002 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$1,223 | \$1,217 | \$2,478 |
| Total Weapons Activities | \$631,186 | \$626,899 | \$1,060,657 |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$110,453 | \$109,591 | \$118,675 |
| Program Direction | \$64,000 | \$63,565 | \$70,653 |
| Total Environment, Health, Safety and Security | \$174,453 | \$173,156 | \$189,328 |
| Enterprise Assessments | | | |
| Enterprise Assessments | \$24,170 | \$23,918 | \$23,918 |
| Program Direction | \$51,000 | \$50,999 | \$52,702 |
| Total Enterprise Assessments | \$75,170 | \$74,917 | \$76,620 |
| Specialized Security Activities | | | |
| Specialized Security Activities | \$237,912 | \$236,296 | \$254,378 |
| Hearings and Appeals | | | |
| Program Direction | \$5,500 | \$5,463 | \$5,739 |
| Office of Legacy Management | | | |
| Legacy Management | \$15,317 | \$15,962 | \$21,441 |
| Total Other Defense Activities | \$508,352 | \$505,794 | \$547,506 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$24,159 | \$23,994 | \$29,300 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$22,448 | \$22,293 | \$59,954 |
| Legacy Contractor Pensions | | | |
| Legacy Contractor Pensions | \$83,208 | \$82,643 | \$28,640 |
| Global Material Security | | | |
| Global Material Security | \$4,023 | \$3,996 | \$7,704 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$5,294 | \$5,258 | \$6,053 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$3,375 | \$3,351 | \$14,601 |
| Nonproliferation Construction | | | |
| Nonproliferation Construction | \$785 | \$780 | \$27,200 |
| Total Defense Nuclear Nonproliferation | \$143,292 | \$142,315 | \$173,452 |
| Naval Reactors | | | |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 119 of 128

| Washington Headquarters | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Naval Reactors Program | | | |
| Naval Reactors Program | \$88,911 | \$88,307 | \$118,118 |
| Program Direction | | | |
| Program Direction | \$24,400 | \$24,234 | \$27,509 |
| <i>Total Naval Reactors</i> | \$113,311 | \$112,541 | \$145,627 |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | | | |
| Federal Salaries and Expenses | \$282,369 | \$280,454 | \$306,224 |
| <i>Total Federal Salaries and Expenses</i> | \$282,369 | \$280,454 | \$306,224 |
| Departmental Administration | | | |
| Energy Policy and Systems Analysis | | | |
| Energy Policy and Systems Analysis | \$31,000 | \$30,789 | \$0 |
| Office of Policy | | | |
| Office of Policy | \$0 | \$0 | \$2,510 |
| <i>Total Office of Policy</i> | \$0 | \$0 | \$2,510 |
| Departmental Administration | | | |
| Program Direction | \$12,373 | \$12,289 | \$15,005 |
| <i>Total Departmental Administration</i> | \$12,373 | \$12,289 | \$15,005 |
| Small and Disadvantaged Business Utilization | | | |
| Program Direction | \$3,000 | \$2,980 | \$3,170 |
| <i>Total Small and Disadvantaged Business Utilization</i> | \$3,000 | \$2,980 | \$3,170 |
| International Affairs | | | |
| Program Direction | \$18,000 | \$17,878 | \$24,545 |
| Office of Indian Energy | | | |
| Office of Indian Energy | \$3,369 | \$9,158 | \$8,405 |
| <i>Total Office of Indian Energy</i> | \$3,369 | \$9,158 | \$8,405 |
| Chief Financial Officer | | | |
| Program Direction | \$47,758 | \$47,424 | \$47,428 |
| Program Direction | | | |
| Program Direction | \$24,500 | \$24,334 | \$25,625 |
| <i>Total Program Direction</i> | \$24,500 | \$24,334 | \$25,625 |
| Congressional, and Intergovernmental Affairs | | | |
| Program Direction | \$6,200 | \$6,158 | \$6,212 |
| Public Affairs | | | |
| Program Direction | \$3,431 | \$3,408 | \$6,594 |
| General Counsel | | | |
| Program Direction | \$33,000 | \$32,776 | \$33,075 |
| Office of the Secretary | | | |
| Program Direction | \$5,089 | \$5,054 | \$5,395 |
| Management | | | |
| Program Direction | \$52,924 | \$52,565 | \$54,872 |
| Economic Impact & Diversity | | | |
| Program Direction | \$10,169 | \$10,100 | \$10,005 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 120 of 128

| Washington Headquarters | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Chief Information Officer | | | |
| Program Direction | \$33,262 | \$33,036 | \$37,758 |
| Cybersecurity and Secure Management | \$21,006 | \$20,863 | \$36,670 |
| Corporate IT Program Support | \$20,224 | \$20,087 | \$22,365 |
| <i>Total Chief Information Officer</i> | \$74,492 | \$73,986 | \$96,793 |
| <i>Total Departmental Administration</i> | \$325,305 | \$328,899 | \$339,634 |
| Office of the Inspector General | | | |
| Office of the Inspector General | | | |
| Office of the Inspector General | \$48,692 | \$48,361 | \$51,330 |
| <i>Total Office of the Inspector General</i> | \$48,692 | \$48,361 | \$51,330 |
| Federal Energy Regulatory Commission | | | |
| Just and Reasonable Rates, Terms and Conditions | | | |
| Just and Reasonable Rates, Terms and Conditions | \$159,650 | \$159,984 | \$171,318 |
| Safe, Reliable, Secure, & Efficient Infrastructure | | | |
| Safe, Reliable, Secure, & Efficient Infrastructure | \$123,576 | \$121,498 | \$130,090 |
| Mission Support through Organizational Excellence | | | |
| Mission Support through Organizational Excellence | \$63,574 | \$62,963 | \$68,492 |
| <i>Total Federal Energy Regulatory Commission</i> | \$346,800 | \$344,445 | \$369,900 |
| Fossil Energy Research and Development | | | |
| CCS and Power Systems | | | |
| Carbon Storage | \$3,379 | \$3,356 | \$0 |
| Advanced Energy Systems | \$2,747 | \$2,728 | \$0 |
| Cross Cutting Research | \$4,655 | \$4,623 | \$0 |
| <i>Total CCS and Power Systems</i> | \$10,781 | \$10,707 | \$0 |
| Natural Gas Technologies | | | |
| Natural Gas Technologies | \$3,782 | \$3,756 | \$0 |
| Program Direction | | | |
| Headquarters Program Direction | \$31,734 | \$31,519 | \$30,070 |
| Special Recruitment Programs | | | |
| Special Recruitment Programs | \$700 | \$695 | \$200 |
| Unconventional FE Technologies from Petroleum – Oil | | | |
| Unconventional FE Technologies from Petroleum – Oil | \$1,771 | \$1,759 | \$0 |
| <i>Total Fossil Energy Research and Development</i> | \$48,768 | \$48,436 | \$30,270 |
| Naval Petroleum and Oil Shale Reserves | | | |
| Naval Petroleum and Oil Shale Reserves | | | |
| Management | \$1,070 | \$1,063 | \$1,000 |
| <i>Total Naval Petroleum and Oil Shale Reserves</i> | \$1,070 | \$1,063 | \$1,000 |
| Defense Environmental Cleanup | | | |
| Program Direction | | | |
| Headquarters | \$90,752 | \$84,026 | \$88,087 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 121 of 128

| Washington Headquarters | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Program Support | | | |
| Program Support | \$14,979 | \$14,878 | \$12,979 |
| Technology Development | | | |
| Technology Development | \$25,025 | \$24,855 | \$25,000 |
| Excess Facilities | | | |
| Excess Facilities | \$0 | \$0 | \$150,000 |
| <i>Total Defense Environmental Cleanup</i> | <i>\$130,756</i> | <i>\$123,759</i> | <i>\$276,066</i> |
| Strategic Petroleum Reserve | | | |
| SPR Econometric Modelling Support | | | |
| Management | \$8,511 | \$8,453 | \$8,430 |
| <i>Total Strategic Petroleum Reserve</i> | <i>\$8,511</i> | <i>\$8,453</i> | <i>\$8,430</i> |
| Northeast Home Heating Oil Reserve Account | | | |
| Northeast Home Heating Oil Reserve | | | |
| Northeast Home Heating Oil Reserve | \$1,386 | \$1,353 | \$962 |
| <i>Total Northeast Home Heating Oil Reserve Account</i> | <i>\$1,386</i> | <i>\$1,353</i> | <i>\$962</i> |
| Energy Information Administration | | | |
| Energy Information Administration | | | |
| National Energy Information System | \$122,000 | \$121,171 | \$115,035 |
| <i>Total Energy Information Administration</i> | <i>\$122,000</i> | <i>\$121,171</i> | <i>\$115,035</i> |
| Defense EM Funded UE D&D Fund Contribution | | | |
| Uranium Enrichment D & D Fund Contribution | | | |
| Uranium Enrichment D & D Fund Contribution | \$563,000 | \$559,177 | \$0 |
| <i>Total Defense EM Funded UE D&D Fund Contribution</i> | <i>\$563,000</i> | <i>\$559,177</i> | <i>\$0</i> |
| <i>Total Washington Headquarters</i> | <i>\$5,046,618</i> | <i>\$5,628,333</i> | <i>\$4,459,020</i> |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 122 of 128

| Waste Isolation Pilot Plant | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Weapons Activities | | | |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$1,847 | \$1,834 | \$0 |
| <hr/> | | | |
| <i>Total Weapons Activities</i> | \$1,847 | \$1,834 | \$0 |
| | | | |
| Defense Nuclear Nonproliferation | | | |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$56 | \$56 | \$100 |
| <hr/> | | | |
| <i>Total Defense Nuclear Nonproliferation</i> | \$56 | \$56 | \$100 |
| | | | |
| Defense Environmental Cleanup | | | |
| Waste Isolation Pilot Plant | | | |
| Operation and Maintenance | \$253,318 | \$251,598 | \$305,212 |
| Transportation | \$19,868 | \$19,733 | \$25,500 |
| <hr/> | | | |
| <i>Total Waste Isolation Pilot Plant</i> | \$273,186 | \$271,331 | \$330,712 |
| <hr/> | | | |
| <i>Total Defense Environmental Cleanup</i> | \$273,186 | \$271,331 | \$330,712 |
| <hr/> | | | |
| <i>Total Waste Isolation Pilot Plant</i> | \$275,089 | \$273,221 | \$330,812 |

Department Of Energy
FY 2019 Congressional Budget
Laboratory Table
(Dollars In Thousands)

2/23/2018
2:02:34PM
Page 123 of 128

| Weldon Spring Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$7,911 | \$8,000 | \$2,996 |
| <i>Total Other Defense Activities</i> | \$7,911 | \$8,000 | \$2,996 |
| <i>Total Weldon Spring Site Office</i> | \$7,911 | \$8,000 | \$2,996 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 124 of 128

| West Valley Demonstration Project | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Non-Defense Environmental Cleanup | | | |
| West Valley Demonstration Project | | | |
| West Valley Demonstration Project | \$66,413 | \$65,963 | \$60,554 |
| <i>Total Non-Defense Environmental Cleanup</i> | \$66,413 | \$65,963 | \$60,554 |
| <hr/> | | | |
| Defense Environmental Cleanup | | | |
| Safeguards and Security | | | |
| West Valley | \$3,215 | \$3,193 | \$3,133 |
| <i>Total Defense Environmental Cleanup</i> | \$3,215 | \$3,193 | \$3,133 |
| <hr/> | | | |
| <i>Total West Valley Demonstration Project</i> | \$69,628 | \$69,156 | \$63,687 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 125 of 128

| Western Area Power Administration | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Electricity Delivery and Energy Reliability | | | |
| Electricity Delivery and Energy Reliability | | | |
| Infrastructure Security & Energy Restoration | \$289 | \$289 | \$0 |
| Program Direction | \$2 | \$0 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$291 | \$289 | \$0 |
| <i>Total Electricity Delivery and Energy Reliability</i> | \$291 | \$289 | \$0 |
| Departmental Administration | | | |
| Office of Indian Energy | | | |
| Office of Indian Energy | \$285 | \$150 | \$0 |
| <i>Total Departmental Administration</i> | \$285 | \$150 | \$0 |
| Falcon & Amistad - Operating & Maintenance Fund | | | |
| Falcon & Amistad Operating and Maintenance Fund | | | |
| Falcon & Amistad - Operating and Maintenance | \$4,070 | \$4,042 | \$5,207 |
| <i>Total Falcon & Amistad - Operating & Maintenance Fund</i> | \$4,070 | \$4,042 | \$5,207 |
| Western Area Power Admin. Const.,Rehab.,O&M | | | |
| Systems Operation and Maintenance | | | |
| Systems Operation and Maintenance | \$462,264 | \$276,692 | \$381,261 |
| Program Direction | | | |
| Program Direction | \$220,154 | \$218,395 | \$199,347 |
| <i>Total Western Area Power Admin. Const.,Rehab.,O&M</i> | \$682,418 | \$495,087 | \$580,608 |
| Colorado River Basins Power Marketing Fund | | | |
| Equipment, Contracts and Other Related Expenses | | | |
| Colorado River Storage Project | \$151,324 | \$127,055 | \$157,389 |
| Program Direction | | | |
| Program Direction | \$62,206 | \$58,341 | \$62,948 |
| <i>Total Colorado River Basins Power Marketing Fund</i> | \$213,530 | \$185,396 | \$220,337 |
| <i>Total Western Area Power Administration</i> | \$900,594 | \$684,964 | \$806,152 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 126 of 128

| Y-12 National Security Complex | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| Weapons Activities | | | |
| Directed Stockpile Work | | | |
| Directed Stockpile Work | \$421,793 | \$418,929 | \$520,934 |
| Science | | | |
| Science Campaign | \$826 | \$820 | \$0 |
| Engineering | | | |
| Engineering Campaign | \$2,332 | \$2,316 | \$2,560 |
| Advanced Simulation & Computing | | | |
| Advanced Simulation & Computing Campaign | \$375 | \$372 | \$500 |
| Defense Nuclear Security | | | |
| Defense Nuclear Security | \$169,042 | \$167,894 | \$173,018 |
| Information technology and Cybersecurity | | | |
| Information technology and Cybersecurity | \$7,163 | \$7,114 | \$6,765 |
| Infrastructure and Operations | | | |
| Infrastructure and Operations | \$874,983 | \$869,041 | \$975,600 |
| Secure Transportation Asset | | | |
| Secure Transportation Asset | \$0 | \$0 | \$5 |
| Advanced Manufacturing Development | | | |
| Advanced Manufacturing Development | \$32,857 | \$32,634 | \$34,987 |
| Total Weapons Activities | \$1,509,371 | \$1,499,120 | \$1,714,369 |
| Defense Nuclear Nonproliferation | | | |
| Defense Nuclear Nonproliferation R&D | | | |
| Defense Nuclear Nonproliferation R&D | \$499 | \$496 | \$668 |
| Nuclear Counterterrorism and Incident Response | | | |
| Nuclear Counterterrorism Incident Response | \$2,707 | \$2,689 | \$2,871 |
| Global Material Security | | | |
| Global Material Security | \$8,497 | \$8,439 | \$8,926 |
| Material Management and Minimization | | | |
| Material Management and Minimization | \$41,377 | \$41,096 | \$35,427 |
| Nonproliferation and Arms Control | | | |
| Nonproliferation and Arms Control | \$1,330 | \$1,321 | \$1,099 |
| Total Defense Nuclear Nonproliferation | \$54,410 | \$54,041 | \$48,991 |
| Total Y-12 National Security Complex | \$1,563,781 | \$1,553,161 | \$1,763,360 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 127 of 128

| Y-12 Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|--|--------------------|--------------------------|--------------------|
| <hr/> | | | |
| Other Defense Activities | | | |
| Environment, Health, Safety and Security | | | |
| Environment, Health, Safety and Security | \$20 | \$20 | \$20 |
| <hr/> | | | |
| <i>Total Other Defense Activities</i> | \$20 | \$20 | \$20 |
| Defense Environmental Cleanup | | | |
| Oak Ridge Reservation | | | |
| Nuclear Facility D & D, Y-12 | \$61,751 | \$61,332 | \$30,214 |
| OR Technology Development and Deployment | \$3,000 | \$2,980 | \$3,000 |
| <hr/> | | | |
| <i>Total Oak Ridge Reservation</i> | \$64,751 | \$64,312 | \$33,214 |
| <hr/> | | | |
| <i>Total Defense Environmental Cleanup</i> | \$64,751 | \$64,312 | \$33,214 |
| <hr/> | | | |
| <i>Total Y-12 Site Office</i> | \$64,771 | \$64,332 | \$33,234 |

Department Of Energy
 FY 2019 Congressional Budget
 Laboratory Table
 (Dollars In Thousands)

2/23/2018
 2:02:34PM
 Page 128 of 128

| Yucca Mountain Site Office | FY 2017 Enacted | FY 2018 Annualized CR | FY 2019 Request |
|---|--------------------|--------------------------|--------------------|
| Other Defense Activities | | | |
| Office of Legacy Management | | | |
| Legacy Management | \$1,900 | \$0 | \$0 |
| <i>Total Other Defense Activities</i> | \$1,900 | \$0 | \$0 |
| <i>Total Yucca Mountain Site Office</i> | \$1,900 | \$0 | \$0 |