

Department of Energy

FY 2021 Congressional Budget Request



Laboratory Tables

Preliminary

Department of Energy

FY 2021 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 discretionary and supplemental funding. 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.



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DEPARTMENT OF ENERGY
Laboratory Table Summary Report
FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Ames Laboratory	48,592	47,024	22,601
Ames Site Office	658	678	690
Argonne National Laboratory	835,000	867,162	720,619
Argonne Site Office	4,415	4,424	4,590
Bay Area Site Office	0	5,834	5,947
Berkeley Site Office	3,588	0	0
Bettis Atomic Power Laboratory	432,317	386,962	375,825
Brookhaven National Laboratory	585,642	575,792	528,627
Brookhaven Site Office	4,905	4,575	4,546
Carlsbad Area Office	19,003	18,371	17,838
Chicago Operations Office	341,953	362,258	325,979
Consolidated Business Center	36,017	44,697	35,627
Consolidated Service Center - Illinois	0	22,621	22,689
Consolidated Service Center - Tennessee	0	22,621	22,688
East Tennessee Technology Park (K25)	236,281	232,348	168,961
Energy Technology Engineering Center	11,000	18,200	11,000
Fermi National Accelerator Laboratory	547,014	584,493	398,447
Fermi Site Office	2,581	3,070	2,937
Fernald Environmental Management Project	1,100	1,100	1,100
Golden Field Office	499,192	737,377	166,395
Hanford Site	943,976	991,180	652,084
Idaho National Laboratory	1,824,417	1,744,659	1,473,460
Idaho Operations Office	212,590	421,550	128,654
Kansas City National Security Complex (KCNSC)	753,953	1,013,074	1,199,296
Kansas City Site Office	7,602	7,587	7,633
Knolls Atomic Power Laboratory	768,005	730,718	661,840
Lawrence Berkeley National Laboratory	882,595	888,572	612,742
Lawrence Livermore National Laboratory	1,596,081	1,887,839	2,022,552
Lexington Office	200	200	200
Livermore Site Office	17,641	19,166	18,925
Los Alamos National Laboratory	2,534,686	2,578,527	3,428,436
Los Alamos Site Office	15,699	17,364	17,740
Miamisburg Site	5	5	5
Moab Site	45,000	45,000	47,653
National Energy Technology Lab	683,765	710,384	425,103
National Renewable Energy Laboratory	364,076	464,275	216,785
Naval Petroleum Reserve No 1	8,000	12,000	11,000
Naval Reactors Laboratory Field Office	20,193	21,600	21,480

DEPARTMENT OF ENERGY
Laboratory Table Summary Report
FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Naval Research Laboratory	10,250	10,600	8,590
Nevada Field Office	103,345	102,178	109,081
Nevada National Security Site	414,907	510,730	744,032
Nevada Operations Office	4,740	4,741	5,065
NNSA Albuquerque Complex	913,124	954,370	823,761
NNSA Production Office (NPO)	38,045	32,617	35,495
Oak Ridge Institute for Science & Education	34,052	21,383	12,157
Oak Ridge National Laboratory	1,887,444	2,058,670	1,502,682
Oak Ridge National Laboratory Site Office	5,551	5,934	6,074
Oak Ridge Office	116,070	79,533	72,829
Oak Ridge Reservation	74,000	101,100	58,000
Oak Ridge Reservation (Off-Site)	5,700	5,900	4,930
Office of River Protection	1,605,270	1,648,543	1,286,508
Office of Scientific & Technical Information	11,586	11,937	11,689
Pacific Northwest National Laboratory	643,961	599,239	549,526
Pacific Northwest Site Office	5,084	5,186	5,036
Paducah Gaseous Diffusion Plant	290,185	326,737	297,447
Pantex Plant	825,930	885,463	1,002,025
Portsmouth Gaseous Diffusion Plant	475,806	493,427	491,306
Princeton Plasma Physics Laboratory	112,091	100,053	101,592
Princeton Site Office	2,032	2,210	2,245
Richland Operations Office	60,700	61,273	53,030
Rocky Flats Site	2,000	1,900	1,800
Sandia National Laboratories	2,368,996	2,518,989	2,797,577
Savannah River National Laboratory	2,569	3,088	1,460
Savannah River Operations Office	240,215	254,160	242,934
Savannah River Site	1,963,781	2,408,783	2,619,470
Savannah River Site Office	550	700	600
Separations Process Research Unit	15,000	15,300	15,000
SLAC National Accelerator Laboratory	492,090	404,105	332,715
Southeastern Power Administration Office	75,324	77,301	96,647
Southwestern Power Administration Office	126,876	138,613	159,444
Stanford Site Office	2,476	0	0
Strategic Petroleum Reserve - Bayou Choctow	13,523	13,806	15,851
Strategic Petroleum Reserve - Big Hill	22,176	19,276	23,581
Strategic Petroleum Reserve - Bryan Mound	25,473	21,139	17,358
Strategic Petroleum Reserve - West Hackberry	24,093	22,299	20,770
Strategic Petroleum Reserve Project Office	117,637	115,720	96,239

DEPARTMENT OF ENERGY
Laboratory Table Summary Report
 FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Thomas Jefferson National Accelerator Facility	133,005	139,466	134,436
Thomas Jefferson Site Office	1,971	2,148	2,241
University of Rochester	80,000	76,480	75,000
Washington Headquarters	4,850,750	5,692,215	5,968,691
Waste Isolation Pilot Plant	406,991	399,613	388,023
West Valley Demonstration Project	78,133	79,611	92,411
Western Area Power Administration Office	569,413	589,398	603,927
Y-12 National Security Complex	1,873,220	1,886,572	2,242,356
Y-12 Site Office	89,020	75,020	45,900
Grants	935,195	911,631	451,089
Undesignated LPI	39,095	19,701	2,049
Total DOE by Lab, Plant, and Installation	36,477,188	39,402,165	37,413,363

DEPARTMENT OF ENERGY
Laboratory Table
 Ames Laboratory FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Ames Laboratory			
Research - Basic Energy Sciences	17,620	17,578	17,578
Basic Energy Sciences	17,620	17,578	17,578
Biological & Environmental Research	1,250	1,250	0
Workforce Development for Teachers & Scientists	538	0	0
21-SC-78, Ames Infrastructure Modernization	0	0	2,000
Construction - Science Laboratories Infrastructure	0	0	2,000
Science Laboratories Infrastructure	0	0	2,000
Safeguards and Security - SC	1,231	1,231	1,231
Science Programs	20,639	20,059	20,809
Advanced Manufacturing	25,000	25,000	0
Vehicle Technologies	650	300	0
Hydrogen and Fuel Cells Technologies	686	830	0
Energy Efficiency and Renewable Energy Programs	26,336	26,130	0
Resilient Distribution Systems	75	0	0
Transformer Resilience and Advanced Components	450	0	0
Electricity Programs	525	0	0
Advanced Energy Systems	500	835	1,792
Cross Cutting Research	300	0	0
Advanced Coal Energy Systems & CCUS	800	835	1,792
Fossil Energy	800	835	1,792
Other Departmental Administration	292	0	0
Departmental Administration Programs	292	0	0
Total Ames Laboratory	48,592	47,024	22,601

DEPARTMENT OF ENERGY
Laboratory Table
 Ames Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Ames Site Office			
Program Direction - SC	658	678	690
Science Programs	658	678	690
Total Ames Site Office	658	678	690

DEPARTMENT OF ENERGY
Laboratory Table
Argonne National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Argonne National Laboratory			
Tritium and Domestic Uranium Enrichment	0	30	47
Production Modernization	0	30	47
Assessment Science	532	1,500	3,750
Stockpile Research, Technology, and Engineering	532	1,500	3,750
Safety and Environmental Operations	0	0	30
Infrastructure and Safety	1,650	0	0
Recapitalization	1,650	0	0
Operating	1,650	0	30
Infrastructure and Operations	1,650	0	30
Weapons Activities Programs	2,182	1,530	3,827
Domestic Radiological Security	1,414	640	440
International Radiological Security	489	1,019	947
Nuclear Smuggling Detection and Deterrence	306	767	771
Global Material Security	2,209	2,426	2,158
Conversion (formerly HEU Reactor Conversion)	0	22,700	25,698
Nuclear Material Removal	1,711	1,500	1,800
Laboratory and Partnership Support	5,933	1,462	0
Material Management and Minimization	7,644	25,662	27,498
Nonproliferation & Arms Control	9,018	12,010	11,899
Proliferation Detection R&D	4,170	2,472	2,432
Nonproliferation Fuels Development	22,860	4,800	0
Defense Nuclear Nonproliferation R&D	27,030	7,272	2,432
Emergency Operations	220	225	230
Counterterrorism and Counterproliferation	3,105	3,261	3,358
Nuclear Counterterrorism & Incident Response	3,325	3,486	3,588
Defense Nuclear Nonproliferation Programs	49,226	50,856	47,575
Program Direction - National Nuclear Security Administration	945	428	428
Federal Salaries and Expenses Programs	945	428	428
Research - Advanced Scientific Computing Research	153,798	160,042	154,856
Advanced Scientific Computing Research	153,798	160,042	154,856
Research - Basic Energy Sciences	230,799	239,274	228,709
18-SC-10, Advanced Photon Source Upgrade (APS-U), ANL	130,000	170,000	150,000
Construction - Basic Energy Sciences	130,000	170,000	150,000
Basic Energy Sciences	360,799	409,274	378,709
Biological & Environmental Research	32,250	30,852	20,222
Research - Fusion Energy Sciences	0	181	189
Fusion Energy Sciences	0	181	189
Research - High Energy Physics	15,695	13,913	9,670
High Energy Physics	15,695	13,913	9,670
Operations and Maintenance - Nuclear Physics	33,384	31,433	29,506
Nuclear Physics	33,384	31,433	29,506
Workforce Development for Teachers & Scientists	1,494	0	0
Facilities and Infrastructure (SLI)	23,393	10,800	0
20-SC-77, Argonne Utilities Upgrade, ANL (20-SC-79)	0	500	2,000
19-SC-72, Electrical Capacity and Distribution Capability, ANL	30,000	30,000	0
Construction - Science Laboratories Infrastructure	30,000	30,500	2,000
Science Laboratories Infrastructure	53,393	41,300	2,000
Safeguards and Security - SC	9,996	10,019	10,019

DEPARTMENT OF ENERGY
Laboratory Table
Argonne National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Science Programs	660,809	697,014	605,171
Bioenergy Technologies	10,218	10,218	2,500
Building Technologies	189	2,327	200
Advanced Manufacturing	3,120	2,206	667
Vehicle Technologies	58,000	39,700	16,000
Strategic Programs	0	1,650	200
Geothermal Technologies	51	25	0
Solar Energy Technologies	2,637	874	1,469
Water Power Technologies	791	727	307
Wind Energy Technologies	1,052	1,646	649
Hydrogen and Fuel Cells Technologies	5,399	6,539	2,500
Energy Efficiency and Renewable Energy Programs	81,457	65,912	24,492
Transmission Reliability and Resilience	5,327	5,000	5,000
Resilient Distribution Systems	2,072	759	750
Energy Storage Research	525	0	0
Energy Storage	525	0	0
Transmission Permitting and Technical Assistance	0	125	125
Electricity Programs	7,924	5,884	5,875
Cybersecurity for Energy Delivery Systems	150	900	1,062
Infrastructure Security and Energy Restoration	1,865	5,000	5,898
Cybersecurity, Energy Security, and Emergency Response Programs	2,015	5,900	6,960
Cross Cutting Research	0	30	40
Advanced Coal Energy Systems & CCUS	0	30	40
Unconventional Fossil Energy from Petroleum - Oil Technologies	150	150	55
Fossil Energy	150	180	95
Crosscutting Technology Development	1,610	330	30
Nuclear Science User Facilities	450	1,050	750
NEAMS Joint Modeling and Simulation Program	5,650	0	0
Transformational Challenge Reactor	0	2,500	2,500
Joint Modeling and Simulation Program	0	5,000	5,000
Nuclear Energy Enabling Technologies	7,710	8,880	8,280
Light Water Reactor Sustainability	150	50	50
Advanced Reactor Technologies	9,600	8,374	11,000
Versatile Advanced Test Reactor	958	7,000	0
Advanced SMR R&D	1,343	0	0
Reactors Concepts RD&D	12,051	15,424	11,050
Regulatory Development	0	5,200	2,600
Advanced Reactors Demonstration Program	0	5,200	2,600
Program Direction - Nuclear Energy	125	290	185
International Nuclear Energy Cooperation	90	0	0
Materials Recovery and Waste Form Development (MRWFD)	0	703	281
Material recovery and waste form development	0	703	281
Triso Fuel and Graphite Qualification	0	500	600
Total Advanced Fuels	0	500	600
Fuel Cycle Research and Development	8,819	0	0
Fuel Cycle Laboratory R&D	0	2,711	100
Used Nuclear Fuel Disposition R&D	0	2,000	2,000
Integrated Waste Management System	0	2,000	0
Fuel Cycle Research and Development FCRD	8,819	7,914	2,981
Nuclear Energy Programs	28,795	37,708	25,096

DEPARTMENT OF ENERGY
Laboratory Table
 Argonne National Laboratory FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Other Departmental Administration	352	55	55
Strategic Partnership Projects	200	750	100
Departmental Administration Programs	552	805	155
Environment, Health, Safety & Security	945	945	945
Environment, Health, Safety, and Security	945	945	945
Other Defense Activities Programs	945	945	945
Total Argonne National Laboratory	835,000	867,162	720,619

DEPARTMENT OF ENERGY
Laboratory Table
 Argonne Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Argonne Site Office			
Program Direction - SC	4,415	4,424	4,590
Science Programs	4,415	4,424	4,590
Total Argonne Site Office	4,415	4,424	4,590

DEPARTMENT OF ENERGY
Laboratory Table
 Bay Area Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Bay Area Site Office			
Program Direction - SC	0	5,834	5,947
Science Programs	0	5,834	5,947
Total Bay Area Site Office	0	5,834	5,947

DEPARTMENT OF ENERGY
Laboratory Table
 Berkeley Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Berkeley Site Office			
Program Direction - SC	3,588	0	0
Science Programs	3,588	0	0
Total Berkeley Site Office	3,588	0	0

DEPARTMENT OF ENERGY
Laboratory Table
 Bettis Atomic Power Laboratory FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Bettis Atomic Power Laboratory			
Naval Reactors Development	212,421	231,140	264,037
Columbia-Class Reactor Systems Development	66,014	23,881	15,028
S8G Prototype Refueling	19,424	3,245	2,888
Naval Reactors Operations and Infrastructure	107,499	117,287	82,407
17-D-911 BL Fire System Upgrade	13,200	0	0
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	13,759	11,409	11,465
Construction - Naval Reactors	26,959	11,409	11,465
Naval Reactors Programs	432,317	386,962	375,825
Total Bettis Atomic Power Laboratory	432,317	386,962	375,825

DEPARTMENT OF ENERGY
Laboratory Table
 Brookhaven National Laboratory FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Brookhaven National Laboratory			
Safety and Environmental Operations	325	427	445
Operating	325	427	445
Infrastructure and Operations	325	427	445
Weapons Activities Programs	325	427	445
International Nuclear Security	0	170	195
Domestic Radiological Security	280	0	0
International Radiological Security	75	100	93
Nuclear Smuggling Detection and Deterrence	300	1,232	1,238
Global Material Security	655	1,502	1,526
Conversion (formerly HEU Reactor Conversion)	0	254	275
Material Management and Minimization	0	254	275
Nonproliferation & Arms Control	4,681	2,920	2,893
Proliferation Detection R&D	1,120	3,680	3,621
Nonproliferation Fuels Development	429	0	0
Defense Nuclear Nonproliferation R&D	1,549	3,680	3,621
Counterterrorism and Counterproliferation	2,519	2,595	2,672
Nuclear Counterterrorism & Incident Response	2,519	2,595	2,672
Defense Nuclear Nonproliferation Programs	9,404	10,951	10,987
Research - Advanced Scientific Computing Research	1,590	1,228	1,233
Advanced Scientific Computing Research	1,590	1,228	1,233
Research - Basic Energy Sciences	169,571	182,858	169,475
Basic Energy Sciences	169,571	182,858	169,475
Biological & Environmental Research	17,306	11,998	9,448
Research - High Energy Physics	79,255	80,167	67,847
11-SC-40, LBNF/DUNE, FNAL	3,000	2,942	17,000
Construction - High Energy Physics	3,000	2,942	17,000
High Energy Physics	82,255	83,109	84,847
Operations and Maintenance - Nuclear Physics	209,914	222,778	211,353
20-SC-52, Electron Ion Collider, BNL	0	1,000	1,000
Construction - Nuclear Physics	0	1,000	1,000
Nuclear Physics	209,914	223,778	212,353
Workforce Development for Teachers & Scientists	2,506	0	0
20-SC-71, Critical Utilities Rehabilitation Project, BNL	0	20,000	15,000
19-SC-71, Science User Support Center, BNL	7,000	20,000	7,000
17-SC-73, Core Facility Revitalization, BNL	42,200	0	0
Construction - Science Laboratories Infrastructure	49,200	40,000	22,000
Science Laboratories Infrastructure	49,200	40,000	22,000
Safeguards and Security - SC	13,933	14,013	14,013
Science Programs	546,275	556,984	513,369
Bioenergy Technologies	1,000	0	0
Building Technologies	0	950	0
Vehicle Technologies	2,500	2,500	2,000
Geothermal Technologies	750	0	0
Hydrogen and Fuel Cells Technologies	996	1,206	0
Energy Efficiency and Renewable Energy Programs	5,246	4,656	2,000
Transmission Reliability and Resilience	1,400	500	500
Electricity Programs	1,400	500	500
Nuclear Science User Facilities	500	650	500

DEPARTMENT OF ENERGY
Laboratory Table
Brookhaven National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Nuclear Energy Enabling Technologies	500	650	500
Advanced Reactor Technologies	102	110	150
Versatile Advanced Test Reactor	145	0	0
Reactors Concepts RD&D	247	110	150
Accident Tolerant Fuels	0	712	0
Total Advanced Fuels	0	712	0
Fuel Cycle Research and Development	1,434	0	0
Fuel Cycle Laboratory R&D	0	472	71
Fuel Cycle Research and Development FCRD	1,434	1,184	71
Nuclear Energy Programs	2,181	1,944	721
Other Departmental Administration	105	80	80
Strategic Partnership Projects	0	0	275
Departmental Administration Programs	105	80	355
Environment, Health, Safety & Security	250	250	250
Environment, Health, Safety, and Security	250	250	250
Other Defense Activities Programs	250	250	250
Small Sites - NDEC	20,456	0	0
Non-Defense Environmental Cleanup Programs	20,456	0	0
Total Brookhaven National Laboratory	585,642	575,792	528,627

DEPARTMENT OF ENERGY
Laboratory Table
 Brookhaven Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Brookhaven Site Office			
Program Direction - SC	4,905	4,575	4,546
Science Programs	4,905	4,575	4,546
Total Brookhaven Site Office	4,905	4,575	4,546

DEPARTMENT OF ENERGY
Laboratory Table
 Carlsbad Area Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Carlsbad Area Office			
Domestic Radiological Security	545	0	0
Global Material Security	545	0	0
Defense Nuclear Nonproliferation Programs	545	0	0
Program Direction - Defense Environmental Cleanup	11,878	11,679	11,032
Safeguards and Security - Defense Environmental Cleanup	6,580	6,692	6,806
Defense Environmental Cleanup Programs	18,458	18,371	17,838
Total Carlsbad Area Office	19,003	18,371	17,838

DEPARTMENT OF ENERGY
Laboratory Table
Chicago Operations Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Chicago Operations Office			
Advanced Simulation and Computing	2,000	2,000	0
Stockpile Research, Technology, and Engineering	2,000	2,000	0
Weapons Activities Programs	2,000	2,000	0
Research - Basic Energy Sciences	209,515	226,976	232,818
Basic Energy Sciences	209,515	226,976	232,818
Biological & Environmental Research	1,262	42,525	1,114
Research - Fusion Energy Sciences	21,112	7,799	9,759
Fusion Energy Sciences	21,112	7,799	9,759
Research - High Energy Physics	22,600	0	0
High Energy Physics	22,600	0	0
Operations and Maintenance - Nuclear Physics	58,869	80,974	80,304
Nuclear Physics	58,869	80,974	80,304
Safeguards and Security - SC	50	50	50
Program Direction - SC	24,546	0	0
Payment In Lieu of Taxes PILT	1,713	1,650	1,650
Science Programs	339,667	359,974	325,695
Nuclear Science User Facilities	2	0	0
NEAMS Joint Modeling and Simulation Program	234	0	0
Joint Modeling and Simulation Program	0	234	234
Nuclear Energy Enabling Technologies	236	234	234
Nuclear Energy Programs	236	234	234
Environment, Health, Safety & Security	50	50	50
Environment, Health, Safety, and Security	50	50	50
Other Defense Activities Programs	50	50	50
Total Chicago Operations Office	341,953	362,258	325,979

DEPARTMENT OF ENERGY
Laboratory Table
Consolidated Business Center FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Consolidated Business Center			
Nuclear Material Removal	100	0	0
Material Management and Minimization	100	0	0
Defense Nuclear Nonproliferation Programs	100	0	0
Program Direction - National Nuclear Security Administration	2,100	2,100	2,100
Federal Salaries and Expenses Programs	2,100	2,100	2,100
Environment, Health, Safety & Security	259	259	259
Environment, Health, Safety, and Security	259	259	259
Other Defense Activities Programs	259	259	259
Closure Sites Administration	1,789	1,987	2,087
Program Direction - Defense Environmental Cleanup	31,769	30,351	31,181
Defense Environmental Cleanup Programs	33,558	32,338	33,268
Small Sites - NDEC	0	10,000	0
Non-Defense Environmental Cleanup Programs	0	10,000	0
Total Consolidated Business Center	36,017	44,697	35,627

DEPARTMENT OF ENERGY
Laboratory Table
 Consolidated Service Center - Illinois FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Consolidated Service Center - Illinois			
Program Direction - SC	0	22,621	22,689
Science Programs	0	22,621	22,689
Total Consolidated Service Center - Illinois	0	22,621	22,689

DEPARTMENT OF ENERGY
Laboratory Table
 Consolidated Service Center - Tennessee FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Consolidated Service Center - Tennessee			
Program Direction - SC	0	22,621	22,688
Science Programs	0	22,621	22,688
Total Consolidated Service Center - Tennessee	0	22,621	22,688

DEPARTMENT OF ENERGY
Laboratory Table
 East Tennessee Technology Park (K25) FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
East Tennessee Technology Park (K25)			
Safeguards and Security - Defense Environmental Cleanup	14,023	9,000	9,260
Defense Environmental Cleanup Programs	14,023	9,000	9,260
Small Sites - NDEC	10,000	10,000	0
Non-Defense Environmental Cleanup Programs	10,000	10,000	0
Oak Ridge Reservation (D&D Fund)	195,000	195,693	144,701
Pension and Community and Regulatory Support	17,258	17,655	15,000
Uranium Enrichment D&D Programs	212,258	213,348	159,701
Total East Tennessee Technology Park (K25)	236,281	232,348	168,961

DEPARTMENT OF ENERGY
Laboratory Table
Energy Technology Engineering Center FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Energy Technology Engineering Center			
Small Sites - NDEC	11,000	18,200	11,000
Non-Defense Environmental Cleanup Programs	11,000	18,200	11,000
Total Energy Technology Engineering Center	11,000	18,200	11,000

DEPARTMENT OF ENERGY
Laboratory Table
Fermi National Accelerator Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Fermi National Accelerator Laboratory			
Proliferation Detection R&D	0	500	492
Defense Nuclear Nonproliferation R&D	0	500	492
Defense Nuclear Nonproliferation Programs	0	500	492
Research - Advanced Scientific Computing Research	174	874	874
Advanced Scientific Computing Research	174	874	874
Research - Basic Energy Sciences	135	135	135
Basic Energy Sciences	135	135	135
Research - High Energy Physics	342,303	323,994	271,514
18-SC-42, Proton Improvement Plan II (PIP-II), FNAL	20,000	60,000	20,000
11-SC-40, LBNF/DUNE, FNAL	127,000	168,058	83,500
11-SC-41, Muon to Electron Conversion Experiment, FNAL	30,000	0	0
Construction - High Energy Physics	177,000	228,058	103,500
High Energy Physics	519,303	552,052	375,014
Operations and Maintenance - Nuclear Physics	0	500	0
Nuclear Physics	0	500	0
Workforce Development for Teachers & Scientists	257	0	0
20-SC-80, Utilities Infrastructure Project, FNAL (20-SC-82)	0	500	2,000
17-SC-71, Integrated Engineering Research Center, FNAL	20,000	22,000	12,000
Construction - Science Laboratories Infrastructure	20,000	22,500	14,000
Science Laboratories Infrastructure	20,000	22,500	14,000
Safeguards and Security - SC	7,037	7,877	7,877
Science Programs	546,906	583,938	397,900
Other Departmental Administration	108	55	55
Departmental Administration Programs	108	55	55
Total Fermi National Accelerator Laboratory	547,014	584,493	398,447

DEPARTMENT OF ENERGY
Laboratory Table
 Fermi Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Fermi Site Office			
Program Direction - SC	2,581	3,070	2,937
Science Programs	2,581	3,070	2,937
Total Fermi Site Office	2,581	3,070	2,937

DEPARTMENT OF ENERGY
Laboratory Table
 Fernald Environmental Management Project FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Fernald Environmental Management Project			
Closure Sites Administration	1,100	1,100	1,100
Defense Environmental Cleanup Programs	1,100	1,100	1,100
Total Fernald Environmental Management Project	1,100	1,100	1,100

DEPARTMENT OF ENERGY
Laboratory Table
Golden Field Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Golden Field Office			
Bioenergy Technologies	68,910	95,000	650
Building Technologies	54,885	37,000	13,900
State Energy Program Grants	2,900	1,600	0
Weatherization Assistance Program	355	1,115	0
Training and Technical Assistance	1,355	450	0
Weatherization and Intergovernmental Programs	4,610	3,165	0
Program Direction - Energy Efficiency and Renewable Energy	20,585	24,516	18,400
Advanced Manufacturing	77,000	272,699	69,330
Federal Energy Management Program	4,140	11,623	400
Vehicle Technologies	2,800	0	1,000
Geothermal Technologies	8,500	47,800	12,500
Solar Energy Technologies	139,759	75,865	15,500
Water Power Technologies	42,356	65,550	12,340
Wind Energy Technologies	20,845	35,000	225
Hydrogen and Fuel Cells Technologies	53,007	68,859	21,850
Energy Efficiency and Renewable Energy Programs	497,397	737,077	166,095
Crosscutting Technology Development	1,495	0	0
Nuclear Energy Enabling Technologies	1,495	0	0
Nuclear Energy Programs	1,495	0	0
Indian Energy Policy & Programs	300	300	300
Indian Energy Policy and Programs (IEPP)	300	300	300
Total Golden Field Office	499,192	737,377	166,395

DEPARTMENT OF ENERGY

Laboratory Table
Hanford Site FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Hanford Site			
River Corridor and Other Cleanup Operations	193,692	236,102	54,949
Central Plateau Remediation	660,358	654,800	498,335
18-D-404 Modification of Waste Encapsulation and Storage Facility	1,000	11,000	0
Construction - Richland	1,000	11,000	0
Richland	855,050	901,902	553,284
Safeguards and Security - Defense Environmental Cleanup	86,686	86,778	96,300
Defense Environmental Cleanup Programs	941,736	988,680	649,584
Fast Flux Test Reactor Facility (WA)	2,240	2,500	2,500
Non-Defense Environmental Cleanup Programs	2,240	2,500	2,500
Total Hanford Site	943,976	991,180	652,084

DEPARTMENT OF ENERGY
Laboratory Table
Idaho National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Idaho National Laboratory			
Stockpile Sustainment	200	200	200
Production Operations	0	75	0
Stockpile Management	200	275	200
Tritium and Domestic Uranium Enrichment	2,198	2,114	1,905
Production Modernization	2,198	2,114	1,905
Safety and Environmental Operations	0	1,476	400
Operating	0	1,476	400
Infrastructure and Operations	0	1,476	400
Weapons Activities Programs	2,398	3,865	2,505
International Nuclear Security	3,872	3,668	4,170
Domestic Radiological Security	10,194	12,333	8,474
International Radiological Security	836	418	389
Global Material Security	14,902	16,419	13,033
Conversion (formerly HEU Reactor Conversion)	0	42,600	45,600
Nuclear Material Removal	7,745	10,000	10,700
Material Management and Minimization	7,745	52,600	56,300
Nonproliferation & Arms Control	2,603	3,781	3,746
Proliferation Detection R&D	7,102	5,034	4,954
Nonproliferation Fuels Development	38,394	5,900	0
Nonproliferation Stewardship Program	0	0	3,780
Defense Nuclear Nonproliferation R&D	45,496	10,934	8,734
Counterterrorism and Counterproliferation	4,609	4,747	4,890
Nuclear Counterterrorism & Incident Response	4,609	4,747	4,890
Defense Nuclear Nonproliferation Programs	75,355	88,481	86,703
Naval Reactors Development	97,776	102,114	101,809
S8G Prototype Refueling	0	786	738
Naval Reactors Operations and Infrastructure	163,554	144,103	163,809
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	267,275	221,642	314,371
Construction - Naval Reactors	267,275	221,642	314,371
Naval Reactors Programs	528,605	468,645	580,727
Research - Advanced Scientific Computing Research	70	70	70
Advanced Scientific Computing Research	70	70	70
Research - Basic Energy Sciences	4,592	3,723	3,723
Basic Energy Sciences	4,592	3,723	3,723
Research - Fusion Energy Sciences	5,510	2,500	2,500
Fusion Energy Sciences	5,510	2,500	2,500
Workforce Development for Teachers & Scientists	384	0	0
Science Programs	10,556	6,293	6,293
Bioenergy Technologies	16,627	16,371	3,950
Federal Energy Management Program	457	181	150
Vehicle Technologies	10,500	9,800	4,900
Geothermal Technologies	2,175	25	25
Water Power Technologies	1,301	834	574
Wind Energy Technologies	159	1,166	484
Hydrogen and Fuel Cells Technologies	5,442	6,591	1,200
Energy Efficiency and Renewable Energy Programs	36,661	34,968	11,283
Transmission Reliability and Resilience	1,221	750	750
Resilient Distribution Systems	250	900	900

DEPARTMENT OF ENERGY
Laboratory Table
Idaho National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Energy Storage Research	38	0	0
Energy Storage	38	0	0
Transformer Resilience and Advanced Components	861	300	300
Program Direction - Electricity	7	0	0
Electricity Programs	2,376	1,950	1,950
Cybersecurity for Energy Delivery Systems	13,000	3,000	3,539
Infrastructure Security and Energy Restoration	250	7,000	8,258
Cybersecurity, Energy Security, and Emergency Response Programs	13,250	10,000	11,797
Carbon Capture Utilization and Storage	0	130	73
Advanced Energy Systems	0	434	931
Advanced Coal Energy Systems & CCUS	0	564	1,004
Fossil Energy	0	564	1,004
Crosscutting Technology Development	15,360	14,875	10,500
Energy Innovation Hub for Modeling and Simulation	3,118	0	0
Nuclear Science User Facilities	34,483	24,643	23,270
NEAMS Joint Modeling and Simulation Program	10,005	0	0
Transformational Challenge Reactor	0	950	950
Joint Modeling and Simulation Program	0	9,488	9,000
Nuclear Energy Enabling Technologies	62,966	49,956	43,720
Light Water Reactor Sustainability	18,895	18,785	15,000
Advanced Reactor Technologies	38,393	31,253	30,000
Versatile Advanced Test Reactor	57,763	44,120	0
Advanced SMR R&D	11,938	10,265	150
Reactors Concepts RD&D	126,989	104,423	45,150
National Reactor Innovation Center	0	19,500	9,750
Regulatory Development	0	6,625	3,300
Advanced Reactors Demonstration Program	0	26,125	13,050
Research Reactor Infrastructure	8,951	8,929	11,443
Radiological Facilities Management	8,951	8,929	11,443
INL Operations and Infrastructure	280,190	272,604	201,500
16-E-200 Sample Preparation Laboratory	30,000	25,450	18,000
Construction - Idaho Facilities Management	30,000	25,450	18,000
Idaho Facilities Management	310,190	298,054	219,500
Safeguards and Security - Nuclear Energy	142,191	149,111	133,753
Idaho Sitewide Safeguards and Security	142,191	149,111	133,753
Program Direction - Nuclear Energy	1,109	2,039	1,294
Integrated University Program	0	6	0
International Nuclear Energy Cooperation	938	0	0
Mining, Conversion, and Transportation	0	900	450
Fuel Cycle Research and Development Mining and Conversion FCRD	0	900	450
Accident Tolerant Fuels	0	15,975	7,542
Triso Fuel and Graphite Qualification	0	20,081	22,850
Total Advanced Fuels	0	36,056	30,392
Fuel Cycle Research and Development	57,707	0	0
Fuel Cycle Laboratory R&D	0	6,489	187
Used Nuclear Fuel Disposition R&D	0	1,000	1,000
Integrated Waste Management System	0	200	0
Fuel Cycle Research and Development FCRD	57,707	44,645	32,029
Nuclear Energy Programs	711,041	683,288	499,939
Other Departmental Administration	825	155	155

DEPARTMENT OF ENERGY
Laboratory Table
 Idaho National Laboratory FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Departmental Administration Programs	825	155	155
Environment, Health, Safety & Security	150	150	150
Environment, Health, Safety, and Security	150	150	150
Other Defense Activities Programs	150	150	150
Idaho Cleanup and Waste Disposition	420,000	430,000	257,554
Idaho Excess Facilities D&D	10,000	0	0
Idaho Community and Regulatory Support	3,200	3,500	2,400
Idaho National Laboratory (INL)	433,200	433,500	259,954
Defense Environmental Cleanup Programs	433,200	433,500	259,954
Small Sites - NDEC	10,000	12,800	11,000
Non-Defense Environmental Cleanup Programs	10,000	12,800	11,000
Total Idaho National Laboratory	1,824,417	1,744,659	1,473,460

DEPARTMENT OF ENERGY
Laboratory Table
Idaho Operations Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Idaho Operations Office			
Crosscutting Technology Development	5,170	180	180
Energy Innovation Hub for Modeling and Simulation	90	0	0
Nuclear Science User Facilities	180	180	180
NEAMS Joint Modeling and Simulation Program	1,464	0	0
Joint Modeling and Simulation Program	0	7,000	9,000
Nuclear Energy Enabling Technologies	6,904	7,360	9,360
Light Water Reactor Sustainability	6,601	6,700	5,000
Advanced Reactor Technologies	21,286	2,830	12,000
Versatile Advanced Test Reactor	2,350	0	0
Advanced SMR R&D	50,200	78,430	8,850
Reactors Concepts RD&D	80,437	87,960	25,850
Demonstration 1	0	79,500	0
Demonstration 2	0	79,500	0
Risk Reduction for Future Demonstration	0	29,500	0
Advanced Reactors Demonstration Program	0	188,500	0
Research Reactor Infrastructure	42	42	42
Radiological Facilities Management	42	42	42
INL Operations and Infrastructure	7,215	6,360	6,000
Idaho Facilities Management	7,215	6,360	6,000
Safeguards and Security - Nuclear Energy	3,647	3,900	3,697
Idaho Site-wide Safeguards and Security	3,647	3,900	3,697
Program Direction - Nuclear Energy	30,864	31,424	30,546
Integrated University Program	5,000	4,978	0
International Nuclear Energy Cooperation	1,444	0	0
Materials Recovery and Waste Form Development (MRWFD)	0	20,072	8,029
Material recovery and waste form development	0	20,072	8,029
Accident Tolerant Fuels	0	50,898	19,000
Total Advanced Fuels	0	50,898	19,000
Fuel Cycle Research and Development	66,868	0	0
Used Nuclear Fuel Disposition R&D	0	6,000	6,000
Integrated Waste Management System	0	4,150	0
Fuel Cycle Research and Development FCRD	66,868	81,120	33,029
Nuclear Energy Programs	202,421	411,644	108,524
Other Departmental Administration	1,150	1,150	1,150
Strategic Partnership Projects	1,000	1,000	1,000
Departmental Administration Programs	2,150	2,150	2,150
Environment, Health, Safety & Security	400	400	400
Environment, Health, Safety, and Security	400	400	400
Other Defense Activities Programs	400	400	400
Program Direction - Defense Environmental Cleanup	7,619	7,356	7,580
Defense Environmental Cleanup Programs	7,619	7,356	7,580
Interim Storage & Nuclear Waste Fund Oversight	0	0	10,000
Interim Storage Programs	0	0	10,000
Total Idaho Operations Office	212,590	421,550	128,654

DEPARTMENT OF ENERGY
Laboratory Table
Kansas City National Security Complex (KCNSC) FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Kansas City National Security Complex (KCNSC)			
B61 Life Extension Program	180,900	252,228	276,000
W88 Alteration Program	111,375	150,357	115,809
W80-4 Life Extension Program	47,800	124,455	150,343
W87-1 Modification Program	2,000	3,000	35,000
W93	0	0	2,000
Stockpile Major Modernization	342,075	530,040	579,152
Stockpile Sustainment	121,657	112,008	129,386
Weapons Dismantlement and Disposition	500	630	500
Production Operations	67,550	85,487	92,340
Stockpile Management	531,782	728,165	801,378
Savannah River Plutonium Operations	5,925	11,340	37,993
Savannah River Plutonium Modernization	5,925	11,340	37,993
Plutonium Modernization	5,925	11,340	37,993
Primary Capability Modernization	5,925	11,340	37,993
Production Modernization	5,925	11,340	37,993
Engineering and Integrated Assessments	2,161	4,375	5,026
Advanced Simulation and Computing	1,250	2,500	0
Weapons Technology and Manufacturing Maturation	16,020	16,288	25,000
Stockpile Research, Technology, and Engineering	19,431	23,163	30,026
Operations of Facilities	82,000	78,000	110,000
Safety and Environmental Operations	600	100	7,391
Maintenance and Repair of Facilities	29,000	24,000	34,000
Infrastructure and Safety	11,635	28,700	49,168
Capabilities Based Investments	2,931	18,046	13,000
Recapitalization	14,566	46,746	62,168
Operating	126,166	148,846	213,559
Infrastructure and Operations	126,166	148,846	213,559
STA Operations and Equipment	20,277	25,894	30,286
Secure Transportation Asset	20,277	25,894	30,286
Defense Nuclear Security (DNS)	12,692	12,946	13,973
Defense Nuclear Security	12,692	12,946	13,973
Information Technology and Cyber Security	7,217	7,217	7,217
Weapons Activities Programs	723,490	957,571	1,134,432
Material Disposition	2,550	775	100
Material Management and Minimization	2,550	775	100
Nonproliferation & Arms Control	2,354	2,686	2,661
Proliferation Detection R&D	275	0	0
Defense Nuclear Nonproliferation R&D	275	0	0
Counterterrorism and Counterproliferation	25,274	52,032	62,093
Nuclear Counterterrorism & Incident Response	25,274	52,032	62,093
Defense Nuclear Nonproliferation Programs	30,453	55,493	64,854
Environment, Health, Safety & Security	10	10	10
Environment, Health, Safety, and Security	10	10	10
Other Defense Activities Programs	10	10	10
Total Kansas City National Security Complex (KCNSC)	753,953	1,013,074	1,199,296

DEPARTMENT OF ENERGY
Laboratory Table
 Kansas City Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Kansas City Site Office			
Information Technology and Cyber Security	130	130	130
Weapons Activities Programs	130	130	130
Program Direction - National Nuclear Security Administration	7,472	7,457	7,503
Federal Salaries and Expenses Programs	7,472	7,457	7,503
Total Kansas City Site Office	7,602	7,587	7,633

DEPARTMENT OF ENERGY
Laboratory Table
Knolls Atomic Power Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Knolls Atomic Power Laboratory			
Naval Reactors Development	203,163	181,043	222,505
Columbia-Class Reactor Systems Development	71,986	51,619	49,672
S8G Prototype Refueling	230,576	165,969	131,374
Naval Reactors Operations and Infrastructure	245,320	282,538	250,125
21-D-530 KL Steam and Condensate Upgrades	0	0	4,000
20-D-931, KL Fuel Development Laboratory	0	23,700	0
19-D-930 KS Overhead Piping	10,994	20,900	0
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	5,966	4,949	4,164
Construction - Naval Reactors	16,960	49,549	8,164
Naval Reactors Programs	768,005	730,718	661,840
Total Knolls Atomic Power Laboratory	768,005	730,718	661,840

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Berkeley National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Lawrence Berkeley National Laboratory			
Weapons Technology and Manufacturing Maturation	0	350	0
Stockpile Research, Technology, and Engineering	0	350	0
Information Technology and Cyber Security	650	650	650
Weapons Activities Programs	650	1,000	650
Nonproliferation & Arms Control	303	0	0
Proliferation Detection R&D	7,823	5,250	5,166
Defense Nuclear Nonproliferation R&D	7,823	5,250	5,166
Counterterrorism and Counterproliferation	430	443	456
Nuclear Counterterrorism & Incident Response	430	443	456
Defense Nuclear Nonproliferation Programs	8,556	5,693	5,622
Research - Advanced Scientific Computing Research	213,107	215,822	176,028
Advanced Scientific Computing Research	213,107	215,822	176,028
Research - Basic Energy Sciences	165,806	170,004	161,728
18-SC-12, Advanced Light Source Upgrade (ALS-U), LBNL	60,000	60,000	13,000
Construction - Basic Energy Sciences	60,000	60,000	13,000
Basic Energy Sciences	225,806	230,004	174,728
Biological & Environmental Research	161,607	162,828	122,887
Research - Fusion Energy Sciences	895	1,525	765
Fusion Energy Sciences	895	1,525	765
Research - High Energy Physics	82,427	68,664	52,868
High Energy Physics	82,427	68,664	52,868
Operations and Maintenance - Nuclear Physics	26,121	25,138	19,801
Nuclear Physics	26,121	25,138	19,801
Workforce Development for Teachers & Scientists	1,298	0	0
20-SC-72, Seismic and Safety Modernization, LBNL	0	10,000	10,000
20-SC-78, Linear Assets Modernization Project, LBNL (20-SC-80)	0	500	2,000
19-SC-74, BioEPIC, LBNL	5,000	15,000	6,000
Construction - Science Laboratories Infrastructure	5,000	25,500	18,000
Science Laboratories Infrastructure	5,000	25,500	18,000
Safeguards and Security - SC	7,155	7,175	7,175
Science Programs	723,416	736,656	572,252
Bioenergy Technologies	9,049	9,049	3,100
Building Technologies	31,718	44,784	8,400
State Energy Program Grants	357	875	0
Training and Technical Assistance	170	200	0
Weatherization and Intergovernmental Programs	527	1,075	0
Advanced Manufacturing	12,200	9,868	667
Federal Energy Management Program	4,685	4,020	600
Vehicle Technologies	14,500	13,500	4,250
Strategic Programs	2,750	2,050	1,000
Geothermal Technologies	11,492	4,130	775
Solar Energy Technologies	126	1,349	0
Wind Energy Technologies	1,675	1,674	1,063
Hydrogen and Fuel Cells Technologies	5,479	6,636	2,000
Energy Efficiency and Renewable Energy Programs	94,201	98,135	21,855
Transmission Reliability and Resilience	1,844	250	250
Resilient Distribution Systems	1,060	460	450
Energy Storage Research	810	0	0

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Berkeley National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Energy Storage	810	0	0
Transformer Resilience and Advanced Components	15	0	0
Transmission Permitting and Technical Assistance	743	1,330	1,330
Electricity Programs	4,472	2,040	2,030
Cybersecurity for Energy Delivery Systems	1,700	0	0
Cybersecurity, Energy Security, and Emergency Response Programs	1,700	0	0
Carbon Capture Utilization and Storage	2,281	3,402	1,921
Cross Cutting Research	2,400	81	108
Advanced Coal Energy Systems & CCUS	4,681	3,483	2,029
Unconventional Fossil Energy from Petroleum - Oil Technologies	1,672	1,672	618
Natural Gas Technologies Research	1,525	1,338	323
Fossil Energy	7,878	6,493	2,970
NEAMS Joint Modeling and Simulation Program	200	0	0
Joint Modeling and Simulation Program	0	200	200
Nuclear Energy Enabling Technologies	200	200	200
Program Direction - Nuclear Energy	120	0	0
Fuel Cycle Research and Development	2,808	0	0
Used Nuclear Fuel Disposition R&D	0	3,750	3,750
Fuel Cycle Research and Development FCRD	2,808	3,750	3,750
Nuclear Energy Programs	3,128	3,950	3,950
Other Departmental Administration	95	105	105
Strategic Partnership Projects	3,500	3,500	3,308
Departmental Administration Programs	3,595	3,605	3,413
Small Sites - NDEC	35,000	31,000	0
Non-Defense Environmental Cleanup Programs	35,000	31,000	0
Total Lawrence Berkeley National Laboratory	882,595	888,572	612,742

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Livermore National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Lawrence Livermore National Laboratory			
B61 Life Extension Program	3,700	2,200	695
W88 Alteration Program	871	0	0
W80-4 Life Extension Program	163,064	176,637	189,941
W87-1 Modification Program	17,000	44,000	200,000
W93	0	0	4,000
Stockpile Major Modernization	184,635	222,837	394,636
Stockpile Sustainment	81,909	88,554	88,175
Weapons Dismantlement and Disposition	2,000	3,900	2,000
Production Operations	0	5,955	5,955
Stockpile Management	268,544	321,246	490,766
Savannah River Plutonium Operations	38,089	44,823	62,361
Savannah River Plutonium Modernization	38,089	44,823	62,361
Plutonium Modernization	38,089	44,823	62,361
Primary Capability Modernization	38,089	44,823	62,361
Secondary Capability Modernization	1,600	3,905	13,935
Tritium and Domestic Uranium Enrichment	0	37	47
Production Modernization	39,689	48,765	76,343
Assessment Science	118,265	146,528	181,481
Engineering and Integrated Assessments	53,754	74,143	91,450
Inertial Confinement Fusion	344,000	335,876	339,346
Advanced Simulation and Computing	185,721	288,442	178,024
Weapons Technology and Manufacturing Maturation	26,394	43,850	37,100
Academic Programs	2,000	2,000	1,000
Stockpile Research, Technology, and Engineering	730,134	890,839	828,401
Operations of Facilities	77,000	75,000	80,000
Safety and Environmental Operations	31,215	18,218	35,436
Maintenance and Repair of Facilities	24,000	16,000	36,000
Infrastructure and Safety	55,428	55,458	62,640
Capabilities Based Investments	13,790	17,662	30,430
Recapitalization	69,218	73,120	93,070
Operating	201,433	182,338	244,506
18-D-620, Exascale Computing Facility Modernization Project, LLNL	23,000	50,000	29,200
Programmatic	23,000	50,000	29,200
15-D-612, Emergency Operations Center, LLNL	0	5,000	27,000
Mission Enabling	0	5,000	27,000
I&O - Construction	23,000	55,000	56,200
Infrastructure and Operations	224,433	237,338	300,706
Defense Nuclear Security (DNS)	67,162	67,135	69,699
Defense Nuclear Security	67,162	67,135	69,699
Information Technology and Cyber Security	17,515	28,515	28,515
Weapons Activities Programs	1,347,477	1,593,838	1,794,430
International Nuclear Security	7,070	8,830	10,061
Domestic Radiological Security	1,032	0	0
International Radiological Security	3,926	4,716	4,383
Nuclear Smuggling Detection and Deterrence	4,911	4,491	4,512
Global Material Security	16,939	18,037	18,956
Nuclear Material Removal	34	0	0
Material Disposition	140	0	100

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Livermore National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Material Management and Minimization	174	0	100
Nonproliferation & Arms Control	24,042	23,212	22,998
National Technical Nuclear Forensics R&D	0	0	10,099
Proliferation Detection R&D	45,660	47,150	35,882
Nuclear Detonation Detection	7,690	8,574	16,139
Nonproliferation Stewardship Program	0	750	1,000
Defense Nuclear Nonproliferation R&D	53,350	56,474	53,021
Emergency Operations	663	624	637
Counterterrorism and Counterproliferation	42,128	47,392	59,787
Nuclear Counterterrorism & Incident Response	42,791	48,016	60,424
Defense Nuclear Nonproliferation Programs	137,296	145,739	165,598
Research - Advanced Scientific Computing Research	5,531	2,472	1,724
Advanced Scientific Computing Research	5,531	2,472	1,724
Research - Basic Energy Sciences	1,804	2,948	2,948
Basic Energy Sciences	1,804	2,948	2,948
Biological & Environmental Research	31,587	29,558	18,036
Research - Fusion Energy Sciences	8,819	8,062	8,537
Fusion Energy Sciences	8,819	8,062	8,537
Research - High Energy Physics	2,315	3,750	3,445
High Energy Physics	2,315	3,750	3,445
Operations and Maintenance - Nuclear Physics	1,728	1,769	1,484
Nuclear Physics	1,728	1,769	1,484
Workforce Development for Teachers & Scientists	423	0	0
Science Programs	52,207	48,559	36,174
Bioenergy Technologies	707	700	150
Building Technologies	774	0	0
Advanced Manufacturing	5,200	5,200	4,000
Vehicle Technologies	3,800	3,800	1,000
Geothermal Technologies	1,475	25	25
Solar Energy Technologies	434	1,049	836
Wind Energy Technologies	771	1,327	546
Hydrogen and Fuel Cells Technologies	2,833	3,431	1,000
Energy Efficiency and Renewable Energy Programs	15,994	15,532	7,557
Transmission Reliability and Resilience	4,593	1,750	1,750
Resilient Distribution Systems	2,030	1,750	1,750
Energy Storage Research	663	0	0
Energy Storage	663	0	0
Electricity Programs	7,285	3,500	3,500
Cybersecurity for Energy Delivery Systems	2,400	2,600	3,067
Infrastructure Security and Energy Restoration	350	4,000	4,719
Cybersecurity, Energy Security, and Emergency Response Programs	2,750	6,600	7,786
Carbon Capture Utilization and Storage	475	2,242	1,266
Advanced Coal Energy Systems & CCUS	475	2,242	1,266
Unconventional Fossil Energy from Petroleum - Oil Technologies	1,000	1,000	370
Natural Gas Technologies Research	22	22	2
Fossil Energy	1,497	3,264	1,638
Crosscutting Technology Development	45	0	0
Energy Innovation Hub for Modeling and Simulation	248	0	0
Nuclear Science User Facilities	146	50	50
NEAMS Joint Modeling and Simulation Program	379	0	0

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Livermore National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Joint Modeling and Simulation Program	0	100	100
Nuclear Energy Enabling Technologies	818	150	150
Advanced Reactor Technologies	0	0	50
Reactors Concepts RD&D	0	0	50
Regulatory Development	0	75	50
Advanced Reactors Demonstration Program	0	75	50
Fuel Cycle Research and Development	583	0	0
Used Nuclear Fuel Disposition R&D	0	750	750
Fuel Cycle Research and Development FCRD	583	750	750
Nuclear Energy Programs	1,401	975	1,000
Other Departmental Administration	420	55	55
Departmental Administration Programs	420	55	55
Environment, Health, Safety & Security	3,050	3,050	3,050
Environment, Health, Safety, and Security	3,050	3,050	3,050
Other Defense Activities Programs	3,050	3,050	3,050
Lawrence Livermore National Laboratory (LLNL)	1,704	1,727	1,764
LLNL Excess Facilities D&D	25,000	65,000	0
NNSA Sites and Nevada Off-Sites	26,704	66,727	1,764
Defense Environmental Cleanup Programs	26,704	66,727	1,764
Total Lawrence Livermore National Laboratory	1,596,081	1,887,839	2,022,552

DEPARTMENT OF ENERGY
Laboratory Table
 Lexington Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Lexington Office			
Environment, Health, Safety & Security	200	200	200
Environment, Health, Safety, and Security	200	200	200
Other Defense Activites Programs	200	200	200
Total Lexington Office	200	200	200

DEPARTMENT OF ENERGY
Laboratory Table
 Livermore Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Livermore Site Office			
Program Direction - National Nuclear Security Administration	17,591	19,116	18,925
Federal Salaries and Expenses Programs	17,591	19,116	18,925
Advanced Reactor Technologies	50	50	0
Reactors Concepts RD&D	50	50	0
Nuclear Energy Programs	50	50	0
Total Livermore Site Office	17,641	19,166	18,925

DEPARTMENT OF ENERGY
Laboratory Table
Los Alamos National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Los Alamos National Laboratory			
B61 Life Extension Program	84,170	73,000	65,500
W76 Life Extension Program	30,000	0	0
W76-2 Modification Program	1,367	0	0
W88 Alteration Program	42,591	32,330	22,072
W80-4 Life Extension Program	19,032	24,721	25,098
W87-1 Modification Program	8,000	3,250	10,000
W93	0	0	17,000
Stockpile Major Modernization	185,160	133,301	139,670
Stockpile Sustainment	147,409	153,202	182,423
Weapons Dismantlement and Disposition	2,000	7,600	2,000
Production Operations	39,493	47,235	47,358
Stockpile Management	374,062	341,338	371,451
21-D-512, Plutonium Pit Production Project, LANL	5,000	21,156	226,000
Los Alamos Plutonium Modernization	5,000	21,156	226,000
Savannah River Plutonium Operations	271,564	286,975	618,599
Savannah River Plutonium Modernization	271,564	286,975	618,599
Plutonium Modernization	276,564	308,131	844,599
Primary Capability Modernization	276,564	308,131	844,599
Secondary Capability Modernization	10,333	7,598	2,122
Tritium and Domestic Uranium Enrichment	0	230	47
Production Modernization	286,897	315,959	846,768
Assessment Science	146,385	200,339	361,383
Engineering and Integrated Assessments	67,665	86,342	99,050
Inertial Confinement Fusion	18,500	18,781	20,000
Advanced Simulation and Computing	181,752	221,300	184,054
Weapons Technology and Manufacturing Maturation	33,100	49,648	59,500
Stockpile Research, Technology, and Engineering	447,402	576,410	723,987
Operations of Facilities	227,000	231,000	310,000
Safety and Environmental Operations	14,237	15,813	15,857
Maintenance and Repair of Facilities	97,000	82,000	153,000
Infrastructure and Safety	67,964	78,150	87,504
Capabilities Based Investments	15,640	12,692	15,510
Recapitalization	83,604	90,842	103,014
Operating	421,841	419,655	581,871
18-D-670, Exascale Class Computer Cooling Equipment, LANL	24,000	0	0
15-D-302, TA-55 Reinvestment Project - Phase 3, LANL	0	0	30,000
07-D-220-04, Transuranic Liquid Waste Facility, LANL	0	0	36,687
04-D-125, Chemistry and Metallurgy Research Replacement Project, LANL	237,019	168,444	169,427
Chemistry and Metallurgy Research Replacement (CMRR)	237,019	168,444	169,427
Programmatic	261,019	168,444	236,114
I&O - Construction	261,019	168,444	236,114
Infrastructure and Operations	682,860	588,099	817,985
Defense Nuclear Security (DNS)	112,475	112,430	129,518
Defense Nuclear Security	112,475	112,430	129,518
Information Technology and Cyber Security	17,760	17,760	17,760
Weapons Activities Programs	1,921,456	1,951,996	2,907,469
International Nuclear Security	3,608	4,594	5,230
Domestic Radiological Security	31,563	23,935	16,445

DEPARTMENT OF ENERGY
Laboratory Table
Los Alamos National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
International Radiological Security	969	1,370	1,273
Nuclear Smuggling Detection and Deterrence	9,678	9,468	9,513
Global Material Security	45,818	39,367	32,461
Conversion (formerly HEU Reactor Conversion)	0	200	1,670
Nuclear Material Removal	320	50	250
Material Disposition	48,200	60,600	79,082
Laboratory and Partnership Support	1,145	935	0
Material Management and Minimization	49,665	61,785	81,002
Nonproliferation & Arms Control	17,106	19,250	19,073
National Technical Nuclear Forensics R&D	0	0	13,808
Proliferation Detection R&D	56,028	50,581	35,520
Nuclear Detonation Detection	57,230	66,743	76,009
Nonproliferation Fuels Development	673	0	0
Nonproliferation Stewardship Program	0	0	4,780
Defense Nuclear Nonproliferation R&D	113,931	117,324	116,309
Counterterrorism and Counterproliferation	43,062	48,354	51,804
Nuclear Counterterrorism & Incident Response	43,062	48,354	51,804
Defense Nuclear Nonproliferation Programs	269,582	286,080	314,457
Research - Advanced Scientific Computing Research	3,626	2,930	2,071
Advanced Scientific Computing Research	3,626	2,930	2,071
Research - Basic Energy Sciences	23,337	27,422	26,585
Basic Energy Sciences	23,337	27,422	26,585
Biological & Environmental Research	32,034	30,291	20,321
Research - Fusion Energy Sciences	3,087	3,910	3,410
Fusion Energy Sciences	3,087	3,910	3,410
Research - High Energy Physics	2,640	2,040	1,145
High Energy Physics	2,640	2,040	1,145
Operations and Maintenance - Nuclear Physics	9,360	8,314	8,821
Nuclear Physics	9,360	8,314	8,821
Workforce Development for Teachers & Scientists	532	0	0
Science Programs	74,616	74,907	62,353
Bioenergy Technologies	7,422	7,422	1,950
Vehicle Technologies	350	600	0
Geothermal Technologies	1,436	25	25
Wind Energy Technologies	212	353	0
Hydrogen and Fuel Cells Technologies	5,741	6,954	1,500
Energy Efficiency and Renewable Energy Programs	15,161	15,354	3,475
Transmission Reliability and Resilience	3,700	2,000	2,000
Resilient Distribution Systems	912	1,273	1,200
Electricity Programs	4,612	3,273	3,200
Cybersecurity for Energy Delivery Systems	1,000	0	0
Infrastructure Security and Energy Restoration	500	2,500	2,949
Cybersecurity, Energy Security, and Emergency Response Programs	1,500	2,500	2,949
Carbon Capture Utilization and Storage	3,295	3,474	1,962
Advanced Coal Energy Systems & CCUS	3,295	3,474	1,962
Unconventional Fossil Energy from Petroleum - Oil Technologies	1,279	1,279	473
Natural Gas Technologies Research	1,100	894	298
Fossil Energy	5,674	5,647	2,733
Crosscutting Technology Development	1,000	0	0
Energy Innovation Hub for Modeling and Simulation	615	0	0

DEPARTMENT OF ENERGY
Laboratory Table
Los Alamos National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Nuclear Science User Facilities	0	50	50
NEAMS Joint Modeling and Simulation Program	2,853	0	0
Joint Modeling and Simulation Program	0	2,628	2,600
Nuclear Energy Enabling Technologies	4,468	2,678	2,650
Advanced Reactor Technologies	4,862	4,260	4,000
Versatile Advanced Test Reactor	260	2,000	0
Reactors Concepts RD&D	5,122	6,260	4,000
Accident Tolerant Fuels	0	3,582	1,000
Total Advanced Fuels	0	3,582	1,000
Fuel Cycle Research and Development	12,335	0	0
Fuel Cycle Laboratory R&D	0	2,600	1,000
Used Nuclear Fuel Disposition R&D	0	3,500	3,000
Fuel Cycle Research and Development FCRD	12,335	9,682	5,000
Nuclear Energy Programs	21,925	18,620	11,650
Other Departmental Administration	65	55	55
Departmental Administration Programs	65	55	55
Environment, Health, Safety & Security	95	95	95
Environment, Health, Safety, and Security	95	95	95
Other Defense Activities Programs	95	95	95
Los Alamos National Laboratory (LANL)	220,000	220,000	120,000
NNSA Sites and Nevada Off-Sites	220,000	220,000	120,000
Defense Environmental Cleanup Programs	220,000	220,000	120,000
Total Los Alamos National Laboratory	2,534,686	2,578,527	3,428,436

DEPARTMENT OF ENERGY
Laboratory Table
 Los Alamos Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Los Alamos Site Office			
Information Technology and Cyber Security	51	51	51
Weapons Activities Programs	51	51	51
Program Direction - National Nuclear Security Administration	15,648	17,313	17,689
Federal Salaries and Expenses Programs	15,648	17,313	17,689
Total Los Alamos Site Office	15,699	17,364	17,740

DEPARTMENT OF ENERGY
Laboratory Table
 Miamisburg Site FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Miamisburg Site			
Environment, Health, Safety & Security	5	5	5
Environment, Health, Safety, and Security	5	5	5
Other Defense Activites Programs	5	5	5
Total Miamisburg Site	5	5	5

DEPARTMENT OF ENERGY

Laboratory Table

Moab Site FY 2021

(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Moab Site			
Small Sites - NDEC	45,000	45,000	47,653
Non-Defense Environmental Cleanup Programs	45,000	45,000	47,653
Total Moab Site	45,000	45,000	47,653

DEPARTMENT OF ENERGY
Laboratory Table
National Energy Technology Lab FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
National Energy Technology Lab			
B61 Life Extension Program	5,000	5,130	6,000
W76 Life Extension Program	610	0	0
W76-2 Modification Program	0	2,528	0
W88 Alteration Program	7,282	2,218	6,921
W80-4 Life Extension Program	0	8,196	10,746
W87-1 Modification Program	1,910	2,178	30,270
Stockpile Major Modernization	14,802	20,250	53,937
Stockpile Sustainment	1,944	9,178	491
Production Operations	0	2,065	0
Stockpile Management	16,746	31,493	54,428
Savannah River Plutonium Operations	555	2,322	2,000
Savannah River Plutonium Modernization	555	2,322	2,000
Plutonium Modernization	555	2,322	2,000
Primary Capability Modernization	555	2,322	2,000
Secondary Capability Modernization	382	471	1,350
Tritium and Domestic Uranium Enrichment	763	2,725	3,734
Production Modernization	1,700	5,518	7,084
Engineering and Integrated Assessments	265	1,893	0
Weapons Technology and Manufacturing Maturation	843	3,295	0
Stockpile Research, Technology, and Engineering	1,108	5,188	0
Capabilities Based Investments	0	300	0
Recapitalization	0	300	0
Operating	0	300	0
Infrastructure and Operations	0	300	0
Weapons Activities Programs	19,554	42,499	61,512
Material Disposition	0	750	0
Material Management and Minimization	0	750	0
Defense Nuclear Nonproliferation Programs	0	750	0
Program Direction - National Nuclear Security Administration	113	113	113
Federal Salaries and Expenses Programs	113	113	113
Bioenergy Technologies	311	505	150
Building Technologies	17,750	53,500	0
Program Direction - Energy Efficiency and Renewable Energy	11,345	10,928	0
Vehicle Technologies	128,000	185,100	6,500
Geothermal Technologies	30,000	30,000	0
Hydrogen and Fuel Cells Technologies	20	24	0
Energy Efficiency and Renewable Energy Programs	187,426	280,057	6,650
Transformer Resilience and Advanced Components	25	2,500	4,500
Program Direction - Electricity	2,266	2,983	3,118
Electricity Programs	2,291	5,483	7,618
Cybersecurity for Energy Delivery Systems	32,070	50,900	60,636
Infrastructure Security and Energy Restoration	1,400	5,250	6,193
Program Direction - CESER	2,984	2,802	3,305
Cybersecurity, Energy Security, and Emergency Response Programs	36,454	58,952	70,135
STEP Supercritical CO2	22,430	2,000	0
Transformational Coal Pilots	25,000	20,000	0
CCS and Power Systems	47,430	22,000	0
Carbon Capture Utilization and Storage	75,941	27,643	15,611

DEPARTMENT OF ENERGY
Laboratory Table
National Energy Technology Lab FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Advanced Energy Systems	61,052	34,331	73,674
Cross Cutting Research	33,435	11,415	15,200
NETL Coal Research and Development - Fossil Energy	36,000	38,000	36,000
Advanced Coal Energy Systems & CCUS	206,428	111,389	140,485
Program Direction - Fossil Energy	27,230	27,780	28,410
Unconventional Fossil Energy from Petroleum - Oil Technologies	38,489	38,489	14,224
Natural Gas Technologies Research	22,441	22,106	6,218
NETL Research and Operations - Fossil Energy	50,000	50,000	46,000
NETL Infrastructure - Fossil Energy	45,000	50,000	43,100
Strategic Petroleum Reserve Management	446	466	488
Fossil Energy	437,464	322,230	278,925
Crosscutting Technology Development	55	0	0
Nuclear Energy Enabling Technologies	55	0	0
Program Direction - Nuclear Energy	26	0	0
International Nuclear Energy Cooperation	100	0	0
Nuclear Energy Programs	181	0	0
Other Departmental Administration	50	0	0
Strategic Partnership Projects	150	150	150
Departmental Administration Programs	200	150	150
Loan Guarantee Program	82	150	0
Title XVII Loan Guarantee Programs	82	150	0
Total National Energy Technology Lab	683,765	710,384	425,103

DEPARTMENT OF ENERGY
Laboratory Table
National Renewable Energy Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
National Renewable Energy Laboratory			
Research - Basic Energy Sciences	12,600	12,109	12,109
Basic Energy Sciences	12,600	12,109	12,109
Biological & Environmental Research	827	848	877
Workforce Development for Teachers & Scientists	1,368	0	0
Science Programs	14,795	12,957	12,986
Bioenergy Technologies	53,577	50,577	16,205
Building Technologies	15,764	31,437	4,000
State Energy Program Grants	1,050	1,475	0
Training and Technical Assistance	0	850	0
Weatherization and Intergovernmental Programs	1,050	2,325	0
Advanced Manufacturing	1,825	4,000	0
Federal Energy Management Program	8,636	6,739	2,600
Vehicle Technologies	38,000	20,200	9,200
Strategic Programs	5,250	6,150	3,200
Facilities and Infrastructure - NREL	97,000	130,000	107,000
Geothermal Technologies	9,111	1,800	425
Solar Energy Technologies	45,479	122,416	27,478
Water Power Technologies	19,976	15,838	7,538
Wind Energy Technologies	33,694	30,000	10,947
Hydrogen and Fuel Cells Technologies	14,493	17,555	4,000
Energy Efficiency and Renewable Energy Programs	343,855	439,037	192,593
Transmission Reliability and Resilience	660	2,500	2,500
Resilient Distribution Systems	2,470	3,351	1,600
Energy Storage Research	127	0	0
Energy Storage	127	0	0
Transformer Resilience and Advanced Components	79	0	0
Transmission Permitting and Technical Assistance	85	280	280
Electricity Programs	3,421	6,131	4,380
Infrastructure Security and Energy Restoration	50	4,000	4,719
Cybersecurity, Energy Security, and Emergency Response Programs	50	4,000	4,719
Cross Cutting Research	0	172	229
Advanced Coal Energy Systems & CCUS	0	172	229
Fossil Energy	0	172	229
Program Direction - Nuclear Energy	0	100	0
Nuclear Energy Programs	0	100	0
Other Departmental Administration	1,455	1,378	1,378
Strategic Partnership Projects	500	500	500
Departmental Administration Programs	1,955	1,878	1,878
Total National Renewable Energy Laboratory	364,076	464,275	216,785

DEPARTMENT OF ENERGY
Laboratory Table
 Naval Petroleum Reserve No 1 FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Naval Petroleum Reserve No 1			
Program Direction - Naval Petroleum & Oil Shale Reserve	8,000	12,000	11,000
Fossil Energy	8,000	12,000	11,000
Total Naval Petroleum Reserve No 1	8,000	12,000	11,000

DEPARTMENT OF ENERGY
Laboratory Table
 Naval Reactors Laboratory Field Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Naval Reactors Laboratory Field Office			
Program Direction - Naval Reactors	19,484	20,200	21,480
Naval Reactors Programs	19,484	20,200	21,480
Fuel Cycle Research and Development	709	0	0
Used Nuclear Fuel Disposition R&D	0	1,400	0
Fuel Cycle Research and Development FCRD	709	1,400	0
Nuclear Energy Programs	709	1,400	0
Total Naval Reactors Laboratory Field Office	20,193	21,600	21,480

DEPARTMENT OF ENERGY
Laboratory Table
 Naval Research Laboratory FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Naval Research Laboratory			
Assessment Science	3,750	4,600	4,590
Inertial Confinement Fusion	6,500	6,000	4,000
Stockpile Research, Technology, and Engineering	10,250	10,600	8,590
Weapons Activities Programs	10,250	10,600	8,590
Total Naval Research Laboratory	10,250	10,600	8,590

DEPARTMENT OF ENERGY
Laboratory Table
Nevada Field Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Nevada Field Office			
Engineering and Integrated Assessments	675	0	0
Weapons Technology and Manufacturing Maturation	675	0	0
Stockpile Research, Technology, and Engineering	1,350	0	0
Defense Nuclear Security (DNS)	80,559	80,527	84,537
Defense Nuclear Security	80,559	80,527	84,537
Information Technology and Cyber Security	79	79	79
Weapons Activities Programs	81,988	80,606	84,616
Program Direction - National Nuclear Security Administration	15,345	17,008	17,222
Federal Salaries and Expenses Programs	15,345	17,008	17,222
Program Direction - Nuclear Energy	2,116	1,731	1,914
Nuclear Energy Programs	2,116	1,731	1,914
Environment, Health, Safety & Security	15	15	15
Environment, Health, Safety, and Security	15	15	15
Other Defense Activities Programs	15	15	15
Program Direction - Defense Environmental Cleanup	3,881	2,818	2,814
Defense Environmental Cleanup Programs	3,881	2,818	2,814
Interim Storage & Nuclear Waste Fund Oversight	0	0	2,500
Interim Storage Programs	0	0	2,500
Total Nevada Field Office	103,345	102,178	109,081

DEPARTMENT OF ENERGY
Laboratory Table
Nevada National Security Site FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Nevada National Security Site			
B61 Life Extension Program	0	500	0
Stockpile Major Modernization	0	500	0
Stockpile Sustainment	688	300	1,652
Stockpile Management	688	800	1,652
Savannah River Plutonium Operations	5,419	11,100	14,500
Savannah River Plutonium Modernization	5,419	11,100	14,500
Plutonium Modernization	5,419	11,100	14,500
Primary Capability Modernization	5,419	11,100	14,500
Tritium and Domestic Uranium Enrichment	78	75	153
Production Modernization	5,497	11,175	14,653
Assessment Science	53,099	88,225	99,438
Engineering and Integrated Assessments	15,105	13,761	7,600
Inertial Confinement Fusion	0	0	7,800
Stockpile Research, Technology, and Engineering	68,204	101,986	114,838
Operations of Facilities	95,000	102,000	105,000
Safety and Environmental Operations	6,107	4,535	4,513
Maintenance and Repair of Facilities	34,000	38,000	65,000
Infrastructure and Safety	35,400	42,626	45,790
Capabilities Based Investments	7,700	7,960	10,720
Recapitalization	43,100	50,586	56,510
Operating	178,207	195,121	231,023
17-D-640, U1a Complex Enhancements Project, NNSS	20,000	35,000	160,600
Programmatic	20,000	35,000	160,600
19-D-670, 138kV Power Transmission System Replacement, NNSS	0	6,000	59,000
Mission Enabling	0	6,000	59,000
I&O - Construction	20,000	41,000	219,600
Infrastructure and Operations	198,207	236,121	450,623
Information Technology and Cyber Security	6,622	6,622	6,622
Weapons Activities Programs	279,218	356,704	588,388
International Radiological Security	1,910	611	568
Global Material Security	1,910	611	568
Nonproliferation & Arms Control	359	12	12
National Technical Nuclear Forensics R&D	0	0	1,981
Proliferation Detection R&D	21,231	21,801	10,306
Nuclear Detonation Detection	620	593	11,327
Nonproliferation Stewardship Program	0	15,900	15,000
Defense Nuclear Nonproliferation R&D	21,851	38,294	36,633
Emergency Operations	19,631	21,450	21,609
Counterterrorism and Counterproliferation	36,542	37,638	39,144
Nuclear Counterterrorism & Incident Response	56,173	59,088	60,753
Defense Nuclear Nonproliferation Programs	80,293	98,005	99,947
Other Departmental Administration	0	25	25
Departmental Administration Programs	0	25	25
Nevada Test Site	55,396	55,996	55,672
NNSA Sites and Nevada Off-Sites	55,396	55,996	55,672
Defense Environmental Cleanup Programs	55,396	55,996	55,672
Total Nevada National Security Site	414,907	510,730	744,032

DEPARTMENT OF ENERGY
Laboratory Table
Nevada Operations Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Nevada Operations Office			
Nevada Test Site	4,740	4,741	5,065
NNSA Sites and Nevada Off-Sites	4,740	4,741	5,065
Defense Environmental Cleanup Programs	4,740	4,741	5,065
Total Nevada Operations Office	4,740	4,741	5,065

DEPARTMENT OF ENERGY
Laboratory Table
NNSA Albuquerque Complex FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
NNSA Albuquerque Complex			
B61 Life Extension Program	103,543	106,405	115,865
W76 Life Extension Program	1,890	0	0
W76-2 Modification Program	0	3,866	0
W88 Alteration Program	22,529	27,965	23,007
W80-4 Life Extension Program	51,371	42,447	35,102
W87-1 Modification Program	1,036	500	500
W93	0	0	3,410
Stockpile Major Modernization	180,369	181,183	177,884
Stockpile Sustainment	32,829	38,698	9,037
Weapons Dismantlement and Disposition	13,000	1,113	0
Production Operations	0	3,796	10,105
Stockpile Management	226,198	224,790	197,026
Savannah River Plutonium Operations	7,504	7,237	364
Savannah River Plutonium Modernization	7,504	7,237	364
Plutonium Modernization	7,504	7,237	364
Primary Capability Modernization	7,504	7,237	364
Secondary Capability Modernization	4,488	550	550
Tritium and Domestic Uranium Enrichment	115,887	165,000	148,272
Production Modernization	127,879	172,787	149,186
Assessment Science	62,890	69,277	5,000
Engineering and Integrated Assessments	37,302	48,677	27,932
Inertial Confinement Fusion	16,971	45,563	0
Advanced Simulation and Computing	750	0	0
Weapons Technology and Manufacturing Maturation	32,670	8,206	20,046
Academic Programs	70,856	84,492	85,912
Stockpile Research, Technology, and Engineering	221,439	256,215	138,890
Safety and Environmental Operations	530	25	550
Infrastructure and Safety	24,600	2,832	993
Recapitalization	24,600	2,832	993
Operating	25,130	2,857	1,543
16-D-515, Albuquerque Complex Project	47,953	0	0
Mission Enabling	47,953	0	0
I&O - Construction	47,953	0	0
Infrastructure and Operations	73,083	2,857	1,543
STA Operations and Equipment	101,421	88,432	140,735
Secure Transportation Asset	101,421	88,432	140,735
Defense Nuclear Security (DNS)	7,573	7,767	8,949
Defense Nuclear Security	7,573	7,767	8,949
Weapons Activities Programs	757,593	752,848	636,329
International Nuclear Security	3,518	2,600	2,976
Domestic Radiological Security	5,365	17,294	11,882
International Radiological Security	6,906	5,321	4,946
Nuclear Smuggling Detection and Deterrence	59,859	75,744	76,101
Global Material Security	75,648	100,959	95,905
Conversion (formerly HEU Reactor Conversion)	0	0	500
Nuclear Material Removal	2,200	1,000	3,000
Material Disposition	200	0	0
Laboratory and Partnership Support	20,850	250	0

DEPARTMENT OF ENERGY
Laboratory Table
NNSA Albuquerque Complex FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Material Management and Minimization	23,250	1,250	3,500
Nonproliferation & Arms Control	2,500	0	0
Proliferation Detection R&D	15,002	34,708	34,153
Nuclear Detonation Detection	15,176	16,532	16,245
Nonproliferation Fuels Development	400	0	0
Nonproliferation Stewardship Program	0	3,600	21,000
Defense Nuclear Nonproliferation R&D	30,578	54,840	71,398
99-D-143, Mixed Oxide Fuel Fabrication Facility, SRS	8,383	30,000	0
Nonproliferation Construction	8,383	30,000	0
Counterterrorism and Counterproliferation	289	298	307
Nuclear Counterterrorism & Incident Response	289	298	307
Defense Nuclear Nonproliferation Programs	140,648	187,347	171,110
20-D-931, KL Fuel Development Laboratory	0	500	500
Construction - Naval Reactors	0	500	500
Naval Reactors Programs	0	500	500
Strategic Partnership Projects	8,500	7,078	8,918
Departmental Administration Programs	8,500	7,078	8,918
Environment, Health, Safety & Security	1,000	1,000	1,000
Environment, Health, Safety, and Security	1,000	1,000	1,000
Enterprise Assessments	150	150	150
Office of Enterprise Assessments	150	150	150
Other Defense Activities Programs	1,150	1,150	1,150
Program Direction - Defense Environmental Cleanup	5,233	5,447	5,754
Defense Environmental Cleanup Programs	5,233	5,447	5,754
Total NNSA Albuquerque Complex	913,124	954,370	823,761

DEPARTMENT OF ENERGY
Laboratory Table
NNSA Production Office (NPO) FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
NNSA Production Office (NPO)			
Tritium and Domestic Uranium Enrichment	0	275	0
Production Modernization	0	275	0
Weapons Activities Programs	0	275	0
Material Disposition	14,090	7,135	10,190
Material Management and Minimization	14,090	7,135	10,190
Defense Nuclear Nonproliferation Programs	14,090	7,135	10,190
Program Direction - National Nuclear Security Administration	23,955	25,207	25,305
Federal Salaries and Expenses Programs	23,955	25,207	25,305
Total NNSA Production Office (NPO)	38,045	32,617	35,495

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge Institute for Science & Education FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Oak Ridge Institute for Science & Education			
Assessment Science	100	100	0
Inertial Confinement Fusion	260	0	0
Stockpile Research, Technology, and Engineering	360	100	0
Weapons Activities Programs	360	100	0
Counterterrorism and Counterproliferation	1,860	1,916	1,973
Nuclear Counterterrorism & Incident Response	1,860	1,916	1,973
Defense Nuclear Nonproliferation Programs	1,860	1,916	1,973
Program Direction - National Nuclear Security Administration	570	570	570
Federal Salaries and Expenses Programs	570	570	570
Biological & Environmental Research	4,103	3,187	2,102
Research - Fusion Energy Sciences	750	700	700
Fusion Energy Sciences	750	700	700
Operations and Maintenance - Nuclear Physics	467	697	636
Nuclear Physics	467	697	636
Workforce Development for Teachers & Scientists	11,176	0	0
Safeguards and Security - SC	1,892	1,894	1,894
Science Programs	18,388	6,478	5,332
Bioenergy Technologies	851	351	245
Building Technologies	2,150	650	0
State Energy Program Grants	0	450	0
Training and Technical Assistance	450	450	0
Weatherization and Intergovernmental Programs	450	900	0
Advanced Manufacturing	5,700	5,495	0
Federal Energy Management Program	167	325	0
Vehicle Technologies	900	0	0
Geothermal Technologies	200	600	125
Hydrogen and Fuel Cells Technologies	721	873	500
Energy Efficiency and Renewable Energy Programs	11,139	9,194	870
Infrastructure Security and Energy Restoration	210	1,600	1,887
Cybersecurity, Energy Security, and Emergency Response Programs	210	1,600	1,887
Other Departmental Administration	220	220	220
Departmental Administration Programs	220	220	220
Environment, Health, Safety & Security	1,305	1,305	1,305
Environment, Health, Safety, and Security	1,305	1,305	1,305
Other Defense Activities Programs	1,305	1,305	1,305
Total Oak Ridge Institute for Science & Education	34,052	21,383	12,157

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Oak Ridge National Laboratory			
Tritium and Domestic Uranium Enrichment	44,477	40,855	42,822
Production Modernization	44,477	40,855	42,822
Advanced Simulation and Computing	30	608	0
Stockpile Research, Technology, and Engineering	30	608	0
Safety and Environmental Operations	6,640	8,395	8,550
Infrastructure and Safety	9,350	0	0
Recapitalization	9,350	0	0
Operating	15,990	8,395	8,550
Infrastructure and Operations	15,990	8,395	8,550
Weapons Activities Programs	60,497	49,858	51,372
International Nuclear Security	8,125	12,427	14,168
Domestic Radiological Security	3,900	4,577	3,145
International Radiological Security	6,879	6,091	5,661
Nuclear Smuggling Detection and Deterrence	14,958	10,218	10,266
Global Material Security	33,862	33,313	33,240
Conversion (formerly HEU Reactor Conversion)	0	500	3,450
Nuclear Material Removal	5,761	4,950	6,300
Material Disposition	1,150	2,100	0
Laboratory and Partnership Support	2,255	1,060	0
Material Management and Minimization	9,166	8,610	9,750
Nonproliferation & Arms Control	17,736	20,381	20,193
National Technical Nuclear Forensics R&D	0	0	1,938
Proliferation Detection R&D	30,232	24,481	24,089
Nuclear Detonation Detection	780	830	246
Nonproliferation Fuels Development	6,555	4,300	0
Nonproliferation Stewardship Program	0	750	8,560
Defense Nuclear Nonproliferation R&D	37,567	30,361	32,895
Counterterrorism and Counterproliferation	4,555	7,191	8,415
Nuclear Counterterrorism & Incident Response	4,555	7,191	8,415
Defense Nuclear Nonproliferation Programs	102,886	99,856	106,431
Program Direction - National Nuclear Security Administration	81	81	81
Federal Salaries and Expenses Programs	81	81	81
Research - Advanced Scientific Computing Research	213,837	235,031	228,092
17-SC-20, Office of Science Exascale Computing Project (SC-ECP)	232,706	188,735	168,945
Advanced Scientific Computing Research	446,543	423,766	397,037
Research - Basic Energy Sciences	349,799	374,486	330,118
19-SC-14, Second Target Station (STS), ORNL	1,000	20,000	1,000
18-SC-11, Spallation Neutron Source Proton Power Upgrade (PPU), ORNL	60,000	60,000	5,000
Construction - Basic Energy Sciences	61,000	80,000	6,000
Basic Energy Sciences	410,799	454,486	336,118
Biological & Environmental Research	82,294	78,923	59,393
Research - Fusion Energy Sciences	30,283	31,362	29,272
14-SC-60, U.S. Contributions to ITER (U.S. ITER)	132,000	242,000	107,000
Construction - Fusion Energy Sciences	132,000	242,000	107,000
Fusion Energy Sciences	162,283	273,362	136,272
Research - High Energy Physics	920	697	407
High Energy Physics	920	697	407
Operations and Maintenance - Nuclear Physics	18,206	18,263	16,879

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
20-SC-51, U.S. Stable Isotope Production and Research Center, ORNL	0	12,000	12,000
Construction - Nuclear Physics	0	12,000	12,000
Nuclear Physics	18,206	30,263	28,879
Oak Ridge Nuclear Operations	26,000	26,000	6,000
20-SC-74, Craft Resources Support Facility, ORNL (19-SC-74)	0	15,000	25,000
19-SC-73, Translational Research Capability, ORNL	25,000	25,000	10,000
Construction - Science Laboratories Infrastructure	25,000	40,000	35,000
Science Laboratories Infrastructure	51,000	66,000	41,000
Safeguards and Security - SC	12,864	29,973	29,973
Science Programs	1,184,909	1,357,470	1,029,079
Bioenergy Technologies	13,381	13,381	3,900
Building Technologies	15,316	27,568	5,500
Training and Technical Assistance	1,025	1,550	0
Weatherization and Intergovernmental Programs	1,025	1,550	0
Advanced Manufacturing	32,025	36,028	11,666
Federal Energy Management Program	2,382	6,052	1,150
Vehicle Technologies	52,000	29,500	12,800
Geothermal Technologies	4,133	1,025	25
Solar Energy Technologies	2,581	0	289
Water Power Technologies	6,273	6,985	2,300
Wind Energy Technologies	925	1,306	198
Hydrogen and Fuel Cells Technologies	2,609	3,160	1,000
Energy Efficiency and Renewable Energy Programs	132,650	126,555	38,828
Transmission Reliability and Resilience	2,488	20,900	20,000
Resilient Distribution Systems	4,693	11,076	1,000
Energy Storage Research	4,525	3,500	4,000
Energy Storage	4,525	3,500	4,000
Transformer Resilience and Advanced Components	2,525	3,000	3,000
Transmission Permitting and Technical Assistance	155	0	0
Electricity Programs	14,386	38,476	28,000
Cybersecurity for Energy Delivery Systems	10,800	1,300	1,534
Infrastructure Security and Energy Restoration	2,950	5,500	6,488
Cybersecurity, Energy Security, and Emergency Response Programs	13,750	6,800	8,022
Carbon Capture Utilization and Storage	0	1,075	607
Advanced Energy Systems	0	12,499	26,823
Advanced Coal Energy Systems & CCUS	0	13,574	27,430
Strategic Petroleum Reserve Management	570	570	570
Fossil Energy	570	14,144	28,000
Crosscutting Technology Development	1,035	60	60
Energy Innovation Hub for Modeling and Simulation	19,381	0	0
Nuclear Science User Facilities	6,524	1,250	1,200
NEAMS Joint Modeling and Simulation Program	1,538	0	0
Transformational Challenge Reactor	0	17,000	22,550
Joint Modeling and Simulation Program	0	1,080	2,000
Nuclear Energy Enabling Technologies	28,478	19,390	25,810
Light Water Reactor Sustainability	6,612	6,635	5,000
Advanced Reactor Technologies	17,382	3,983	5,000
Versatile Advanced Test Reactor	45	1,800	0
Advanced SMR R&D	17,450	0	0
Reactors Concepts RD&D	41,489	12,418	10,000

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Regulatory Development	0	2,000	1,000
Advanced Reactors Demonstration Program	0	2,000	1,000
Oak Ridge Nuclear Infrastructure	19,985	19,957	0
Radiological Facilities Management	19,985	19,957	0
Program Direction - Nuclear Energy	250	266	120
International Nuclear Energy Cooperation	146	0	0
Materials Recovery and Waste Form Development (MRWFD)	0	1,100	440
Material recovery and waste form development	0	1,100	440
Accident Tolerant Fuels	0	4,628	1,000
Triso Fuel and Graphite Qualification	0	1,769	1,880
Total Advanced Fuels	0	6,397	2,880
Fuel Cycle Research and Development	25,152	0	0
Fuel Cycle Laboratory R&D	0	1,590	225
Used Nuclear Fuel Disposition R&D	0	5,500	5,000
Integrated Waste Management System	0	7,500	0
Fuel Cycle Research and Development FCRD	25,152	22,087	8,545
Nuclear Energy Programs	115,500	76,118	45,475
Other Departmental Administration	230	55	55
Strategic Partnership Projects	19,350	20,222	12,227
Departmental Administration Programs	19,580	20,277	12,282
Environment, Health, Safety & Security	1,035	1,035	1,035
Environment, Health, Safety, and Security	1,035	1,035	1,035
Other Defense Activities Programs	1,035	1,035	1,035
Advanced Technology Vehicle Manufacturing Loan Program	300	0	0
Advanced Technology Vehicles Manufacturing Loan Programs	300	0	0
OR Nuclear Facility D&D	189,000	213,000	109,077
U233 Disposition Program	52,300	55,000	45,000
Oak Ridge (OR)	241,300	268,000	154,077
Defense Environmental Cleanup Programs	241,300	268,000	154,077
Total Oak Ridge National Laboratory	1,887,444	2,058,670	1,502,682

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge National Laboratory Site Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Oak Ridge National Laboratory Site Office			
Program Direction - SC	5,551	5,934	6,074
Science Programs	5,551	5,934	6,074
Total Oak Ridge National Laboratory Site Office	5,551	5,934	6,074

DEPARTMENT OF ENERGY

Laboratory Table

Oak Ridge Office FY 2021

(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Oak Ridge Office			
Operations and Maintenance - Nuclear Physics	50	0	0
Nuclear Physics	50	0	0
Oak Ridge Landlord	6,434	5,610	5,860
Facilities and Infrastructure (SLI)	11,500	7,272	0
Science Laboratories Infrastructure	17,934	12,882	5,860
Safeguards and Security - SC	23,472	4,558	4,558
Program Direction - SC	24,177	0	0
Payment In Lieu of Taxes PILT	0	2,890	3,000
Science Programs	65,633	20,330	13,418
Program Direction - Nuclear Energy	1,819	1,832	1,862
Civil Nuclear Enrichment	0	40,000	40,000
Material recovery and waste form development	0	40,000	40,000
Fuel Cycle Research and Development	30,200	0	0
Fuel Cycle Research and Development FCRD	30,200	40,000	40,000
Nuclear Energy Programs	32,019	41,832	41,862
Environment, Health, Safety & Security	2,795	2,795	2,795
Environment, Health, Safety, and Security	2,795	2,795	2,795
Other Defense Activities Programs	2,795	2,795	2,795
Program Direction - Defense Environmental Cleanup	15,623	14,576	14,754
Defense Environmental Cleanup Programs	15,623	14,576	14,754
Total Oak Ridge Office	116,070	79,533	72,829

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge Reservation FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Oak Ridge Reservation			
OR Cleanup and Waste Disposition	74,000	101,100	58,000
Oak Ridge (OR)	74,000	101,100	58,000
Defense Environmental Cleanup Programs	74,000	101,100	58,000
Total Oak Ridge Reservation	74,000	101,100	58,000

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge Reservation (Off-Site) FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Oak Ridge Reservation (Off-Site)			
OR Community and Regulatory Support	5,700	5,900	4,930
Oak Ridge (OR)	5,700	5,900	4,930
Defense Environmental Cleanup Programs	5,700	5,900	4,930
Total Oak Ridge Reservation (Off-Site)	5,700	5,900	4,930

DEPARTMENT OF ENERGY
Laboratory Table
Office of River Protection FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Office of River Protection			
Rad Liquid Tank Waste Stabilization and Disposition	771,947	775,000	597,757
18-D-16 Waste treatment and immobilization plant - LBL/Direct Feed LAW	655,000	776,000	609,924
15-D-409 Low Activity Waste Pretreatment System	56,053	0	0
01-D-16-A-D Waste Treatment and Immobilization Plant	15,000	15,000	50,000
01-D-16D High-Level Waste Facility	60,000	25,000	0
01-D-16E Pretreatment Facility	15,000	15,000	0
Construction - Office of River Protection	801,053	831,000	659,924
ORP Low-Level Waste Offsite Disposal	0	10,000	0
Office of River Protection (ORP)	1,573,000	1,616,000	1,257,681
Program Direction - Defense Environmental Cleanup	32,270	32,543	28,827
Defense Environmental Cleanup Programs	1,605,270	1,648,543	1,286,508
Total Office of River Protection	1,605,270	1,648,543	1,286,508

DEPARTMENT OF ENERGY
Laboratory Table
Office of Scientific & Technical Information FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Office of Scientific & Technical Information			
Assessment Science	212	220	220
Stockpile Research, Technology, and Engineering	212	220	220
Information Technology and Cyber Security	213	213	213
Weapons Activities Programs	425	433	433
Nuclear Detonation Detection	40	40	40
Defense Nuclear Nonproliferation R&D	40	40	40
Defense Nuclear Nonproliferation Programs	40	40	40
Research - Advanced Scientific Computing Research	155	157	155
Advanced Scientific Computing Research	155	157	155
Biological & Environmental Research	296	177	159
Research - High Energy Physics	0	189	0
High Energy Physics	0	189	0
Operations and Maintenance - Nuclear Physics	285	285	128
Nuclear Physics	285	285	128
Workforce Development for Teachers & Scientists	200	0	0
Facilities and Infrastructure (SLI)	0	200	200
Science Laboratories Infrastructure	0	200	200
Safeguards and Security - SC	759	759	759
Program Direction - SC	9,120	9,397	9,515
Science Programs	10,815	11,164	10,916
Other Departmental Administration	6	0	0
Departmental Administration Programs	6	0	0
Environment, Health, Safety & Security	300	300	300
Environment, Health, Safety, and Security	300	300	300
Other Defense Activities Programs	300	300	300
Total Office of Scientific & Technical Information	11,586	11,937	11,689

DEPARTMENT OF ENERGY
Laboratory Table
Pacific Northwest National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Pacific Northwest National Laboratory			
Production Operations	0	50	0
Stockpile Management	0	50	0
Secondary Capability Modernization	0	756	756
Tritium and Domestic Uranium Enrichment	40,688	54,279	56,186
Production Modernization	40,688	55,035	56,942
Engineering and Integrated Assessments	20	35	0
Weapons Technology and Manufacturing Maturation	20	35	0
Stockpile Research, Technology, and Engineering	40	70	0
Safety and Environmental Operations	6,275	3,150	7,536
Capabilities Based Investments	0	100	0
Recapitalization	0	100	0
Operating	6,275	3,250	7,536
Infrastructure and Operations	6,275	3,250	7,536
Weapons Activities Programs	47,003	58,405	64,478
International Nuclear Security	3,104	4,064	4,742
Domestic Radiological Security	30,926	26,463	18,182
International Radiological Security	41,620	35,200	32,717
Nuclear Smuggling Detection and Deterrence	53,763	44,458	44,667
Global Material Security	129,413	110,185	100,308
Conversion (formerly HEU Reactor Conversion)	0	22,000	27,712
Nuclear Material Removal	250	0	350
Material Disposition	5,171	100	1,400
Laboratory and Partnership Support	809	0	0
Material Management and Minimization	6,230	22,100	29,462
Nonproliferation & Arms Control	22,659	22,892	22,681
National Technical Nuclear Forensics R&D	0	0	5,509
Proliferation Detection R&D	27,504	28,451	16,302
Nuclear Detonation Detection	4,428	5,122	15,297
Nonproliferation Fuels Development	25,520	0	0
Nonproliferation Stewardship Program	0	750	4,780
Defense Nuclear Nonproliferation R&D	57,452	34,323	36,379
99-D-143, Mixed Oxide Fuel Fabrication Facility, SRS	200	0	0
Nonproliferation Construction	200	0	0
Emergency Operations	1,080	940	960
Counterterrorism and Counterproliferation	2,784	2,867	2,954
Nuclear Counterterrorism & Incident Response	3,864	3,807	3,914
Defense Nuclear Nonproliferation Programs	219,818	193,307	198,253
20-D-931, KL Fuel Development Laboratory	0	2,250	2,000
Construction - Naval Reactors	0	2,250	2,000
Naval Reactors Programs	0	2,250	2,000
Program Direction - National Nuclear Security Administration	0	1,400	1,400
Federal Salaries and Expenses Programs	0	1,400	1,400
Research - Advanced Scientific Computing Research	5,597	4,360	1,915
Advanced Scientific Computing Research	5,597	4,360	1,915
Research - Basic Energy Sciences	33,216	33,838	33,838
Basic Energy Sciences	33,216	33,838	33,838
Biological & Environmental Research	141,297	107,127	84,114
Research - Fusion Energy Sciences	250	650	1,663

DEPARTMENT OF ENERGY
Laboratory Table
Pacific Northwest National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Fusion Energy Sciences	250	650	1,663
Research - High Energy Physics	1,460	1,855	1,160
High Energy Physics	1,460	1,855	1,160
Operations and Maintenance - Nuclear Physics	500	830	287
Nuclear Physics	500	830	287
Workforce Development for Teachers & Scientists	1,022	0	0
18-SC-71, Energy Sciences Capability, PNNL	24,000	23,000	23,000
Construction - Science Laboratories Infrastructure	24,000	23,000	23,000
Science Laboratories Infrastructure	24,000	23,000	23,000
Safeguards and Security - SC	12,459	12,759	12,759
Science Programs	219,801	184,419	158,736
Bioenergy Technologies	17,921	17,350	3,500
Building Technologies	22,898	30,172	4,500
State Energy Program Grants	60	0	0
Weatherization and Intergovernmental Programs	60	0	0
Advanced Manufacturing	300	300	0
Federal Energy Management Program	4,788	4,839	1,300
Vehicle Technologies	14,500	13,300	7,250
Strategic Programs	250	50	100
Geothermal Technologies	3,985	725	25
Solar Energy Technologies	48	316	0
Water Power Technologies	15,565	12,411	4,957
Wind Energy Technologies	6,501	6,430	1,671
Hydrogen and Fuel Cells Technologies	4,904	5,940	1,500
Energy Efficiency and Renewable Energy Programs	91,720	91,833	24,803
Transmission Reliability and Resilience	9,219	12,750	12,850
Resilient Distribution Systems	10,043	6,182	5,000
Energy Storage Research	16,624	15,000	16,000
Energy Storage	16,624	15,000	16,000
Transformer Resilience and Advanced Components	340	0	0
DCEI Energy Mission Assurance	0	1,000	40,000
Transmission Permitting and Technical Assistance	1,373	600	600
Electricity Programs	37,599	35,532	74,450
Cybersecurity for Energy Delivery Systems	6,050	3,300	3,893
Infrastructure Security and Energy Restoration	425	3,500	4,129
Cybersecurity, Energy Security, and Emergency Response Programs	6,475	6,800	8,022
Carbon Capture Utilization and Storage	829	3,952	2,232
Advanced Energy Systems	0	494	1,060
Cross Cutting Research	320	0	0
Advanced Coal Energy Systems & CCUS	1,149	4,446	3,292
Unconventional Fossil Energy from Petroleum - Oil Technologies	500	500	185
Natural Gas Technologies Research	599	699	377
Fossil Energy	2,248	5,645	3,854
Crosscutting Technology Development	1,430	30	30
Nuclear Science User Facilities	0	50	50
Nuclear Energy Enabling Technologies	1,430	80	80
Advanced Reactor Technologies	500	580	600
Versatile Advanced Test Reactor	0	1,000	0
Advanced SMR R&D	277	0	0
Reactors Concepts RD&D	777	1,580	600

DEPARTMENT OF ENERGY
Laboratory Table
Pacific Northwest National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Regulatory Development	0	1,100	550
Advanced Reactors Demonstration Program	0	1,100	550
Program Direction - Nuclear Energy	0	158	195
International Nuclear Energy Cooperation	158	0	0
Mining, Conversion, and Transportation	0	0	450
Fuel Cycle Research and Development Mining and Conversion FCRD	0	0	450
Materials Recovery and Waste Form Development (MRWFD)	0	1,010	404
Material recovery and waste form development	0	1,010	404
Fuel Cycle Research and Development	14,840	0	0
Fuel Cycle Laboratory R&D	0	1,140	171
Used Nuclear Fuel Disposition R&D	0	9,000	9,000
Integrated Waste Management System	0	3,500	0
Fuel Cycle Research and Development FCRD	14,840	14,650	10,025
Nuclear Energy Programs	17,205	17,568	11,450
Other Departmental Administration	188	175	175
Departmental Administration Programs	188	175	175
Environment, Health, Safety & Security	1,905	1,905	1,905
Environment, Health, Safety, and Security	1,905	1,905	1,905
Other Defense Activities Programs	1,905	1,905	1,905
Total Pacific Northwest National Laboratory	643,961	599,239	549,526

DEPARTMENT OF ENERGY
Laboratory Table
Pacific Northwest Site Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Pacific Northwest Site Office			
Program Direction - SC	5,084	5,186	5,036
Science Programs	5,084	5,186	5,036
Total Pacific Northwest Site Office	5,084	5,186	5,036

DEPARTMENT OF ENERGY
Laboratory Table
 Paducah Gaseous Diffusion Plant FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Paducah Gaseous Diffusion Plant			
Program Direction - Defense Environmental Cleanup	16,161	12,398	15,044
Safeguards and Security - Defense Environmental Cleanup	15,577	15,789	16,206
Defense Environmental Cleanup Programs	31,738	28,187	31,250
Gaseous Diffusion Plants	50,345	56,456	57,580
Non-Defense Environmental Cleanup Programs	50,345	56,456	57,580
Paducah Gaseous Diffusion Plant (D&D Fund)	206,000	240,000	206,518
Pension and Community and Regulatory Support	2,102	2,094	2,099
Uranium Enrichment D&D Programs	208,102	242,094	208,617
Total Paducah Gaseous Diffusion Plant	290,185	326,737	297,447

DEPARTMENT OF ENERGY

Laboratory Table
Pantex Plant FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Pantex Plant			
B61 Life Extension Program	60,100	55,552	47,000
W76 Life Extension Program	5,000	0	0
W76-2 Modification Program	2,026	0	0
W88 Alteration Program	40,432	34,660	44,685
W80-4 Life Extension Program	27,500	35,410	40,490
W87-1 Modification Program	500	500	4,000
W93	0	0	500
Stockpile Major Modernization	135,558	126,122	136,675
Stockpile Sustainment	107,178	128,129	128,881
Weapons Dismantlement and Disposition	26,000	27,940	30,000
Production Operations	118,826	116,066	119,818
Stockpile Management	387,562	398,257	415,374
Savannah River Plutonium Operations	1,557	3,047	30,409
Savannah River Plutonium Modernization	1,557	3,047	30,409
Plutonium Modernization	1,557	3,047	30,409
Primary Capability Modernization	1,557	3,047	30,409
Production Modernization	1,557	3,047	30,409
Engineering and Integrated Assessments	2,212	4,284	3,730
Weapons Technology and Manufacturing Maturation	863	5,396	10,700
Stockpile Research, Technology, and Engineering	3,075	9,680	14,430
Operations of Facilities	65,000	67,000	68,000
Safety and Environmental Operations	13,485	6,915	26,174
Maintenance and Repair of Facilities	96,000	82,000	125,000
Infrastructure and Safety	63,100	62,071	72,367
Capabilities Based Investments	10,743	17,103	8,130
Recapitalization	73,843	79,174	80,497
Operating	248,328	235,089	299,671
21-D-510, HE Synthesis, Formulation, and Production Facility, PX	0	0	31,000
18-D-680, Material Staging Facility, PX	24,000	0	0
15-D-301, HE Science & Engineering Facility, PX	0	80,000	43,000
Programmatic	24,000	80,000	74,000
I&O - Construction	24,000	80,000	74,000
Infrastructure and Operations	272,328	315,089	373,671
STA Operations and Equipment	7,317	7,431	7,930
Secure Transportation Asset	7,317	7,431	7,930
Defense Nuclear Security (DNS)	138,903	138,847	143,247
Defense Nuclear Security	138,903	138,847	143,247
Information Technology and Cyber Security	7,572	7,572	7,572
Weapons Activities Programs	818,314	879,923	992,633
Material Disposition	5,100	3,000	6,776
Material Management and Minimization	5,100	3,000	6,776
Proliferation Detection R&D	50	0	0
Defense Nuclear Nonproliferation R&D	50	0	0
Counterterrorism and Counterproliferation	2,456	2,530	2,606
Nuclear Counterterrorism & Incident Response	2,456	2,530	2,606
Defense Nuclear Nonproliferation Programs	7,606	5,530	9,382
Environment, Health, Safety & Security	10	10	10
Environment, Health, Safety, and Security	10	10	10

DEPARTMENT OF ENERGY
Laboratory Table
Pantex Plant FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Other Defense Activites Programs	10	10	10
Total Pantex Plant	825,930	885,463	1,002,025

DEPARTMENT OF ENERGY
Laboratory Table
Portsmouth Gaseous Diffusion Plant FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Portsmouth Gaseous Diffusion Plant			
Safeguards and Security - Defense Environmental Cleanup	15,078	16,490	16,690
Defense Environmental Cleanup Programs	15,078	16,490	16,690
Gaseous Diffusion Plants	50,959	56,629	57,974
Non-Defense Environmental Cleanup Programs	50,959	56,629	57,974
Portsmouth Gaseous Diffusion Plant (D&D Fund)	366,931	367,193	351,854
20-U-401 On-site Waste Disposal Facility	0	10,000	16,500
15-U-408 On-Site Waste Disposal Facility, Portsmouth	41,168	41,102	46,639
Construction - Uranium D&D Fund	41,168	51,102	63,139
Pension and Community and Regulatory Support	1,670	2,013	1,649
Uranium Enrichment D&D Programs	409,769	420,308	416,642
Total Portsmouth Gaseous Diffusion Plant	475,806	493,427	491,306

DEPARTMENT OF ENERGY
Laboratory Table
Princeton Plasma Physics Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Princeton Plasma Physics Laboratory			
Assessment Science	0	10	0
Stockpile Research, Technology, and Engineering	0	10	0
Weapons Activities Programs	0	10	0
Research - Advanced Scientific Computing Research	385	335	335
Advanced Scientific Computing Research	385	335	335
Research - Fusion Energy Sciences	107,770	83,350	74,499
Fusion Energy Sciences	107,770	83,350	74,499
Workforce Development for Teachers & Scientists	512	0	0
21-SC-75, Princeton Plasma Innovation Center, PPPL	0	0	2,000
21-SC-76, Critical Infrastructure Recovery & Renewal, PPPL	0	0	2,000
20-SC-76, Tritium System Demolition and Disposal, PPPL (20-SC-78)	0	13,000	19,400
Construction - Science Laboratories Infrastructure	0	13,000	23,400
Science Laboratories Infrastructure	0	13,000	23,400
Safeguards and Security - SC	3,354	3,358	3,358
Science Programs	112,021	100,043	101,592
Other Departmental Administration	70	0	0
Departmental Administration Programs	70	0	0
Total Princeton Plasma Physics Laboratory	112,091	100,053	101,592

DEPARTMENT OF ENERGY
Laboratory Table
Princeton Site Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Princeton Site Office			
Proliferation Detection R&D	170	300	295
Defense Nuclear Nonproliferation R&D	170	300	295
Defense Nuclear Nonproliferation Programs	170	300	295
Program Direction - SC	1,862	1,910	1,950
Science Programs	1,862	1,910	1,950
Total Princeton Site Office	2,032	2,210	2,245

DEPARTMENT OF ENERGY
Laboratory Table
Richland Operations Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Richland Operations Office			
Counterterrorism and Counterproliferation	1,804	1,858	2,914
Nuclear Counterterrorism & Incident Response	1,804	1,858	2,914
Defense Nuclear Nonproliferation Programs	1,804	1,858	2,914
Infrastructure Security and Energy Restoration	1,415	3,000	3,539
Cybersecurity, Energy Security, and Emergency Response Programs	1,415	3,000	3,539
Strategic Partnership Projects	100	100	100
Departmental Administration Programs	100	100	100
Environment, Health, Safety & Security	1,000	1,000	1,000
Environment, Health, Safety, and Security	1,000	1,000	1,000
Other Defense Activities Programs	1,000	1,000	1,000
Richland Community and Regulatory Support	10,121	10,121	2,500
Richland	10,121	10,121	2,500
Program Direction - Defense Environmental Cleanup	46,260	45,194	42,977
Defense Environmental Cleanup Programs	56,381	55,315	45,477
Total Richland Operations Office	60,700	61,273	53,030

DEPARTMENT OF ENERGY
Laboratory Table
 Rocky Flats Site FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Rocky Flats Site			
Closure Sites Administration	2,000	1,900	1,800
Defense Environmental Cleanup Programs	2,000	1,900	1,800
Total Rocky Flats Site	2,000	1,900	1,800

DEPARTMENT OF ENERGY
Laboratory Table
Sandia National Laboratories FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Sandia National Laboratories			
B61 Life Extension Program	249,300	231,270	198,000
W76 Life Extension Program	8,377	0	0
W76-2 Modification Program	3,541	0	0
W88 Alteration Program	70,754	44,971	35,327
W80-4 Life Extension Program	315,500	422,389	467,740
W87-1 Modification Program	21,500	52,950	180,000
W93	0	0	24,000
Stockpile Major Modernization	668,972	751,580	905,067
Stockpile Sustainment	309,435	326,450	339,077
Weapons Dismantlement and Disposition	2,000	3,600	2,000
Production Operations	134,423	136,254	142,420
Stockpile Management	1,114,830	1,217,884	1,388,564
Savannah River Plutonium Operations	4,709	7,549	66,700
Savannah River Plutonium Modernization	4,709	7,549	66,700
Plutonium Modernization	4,709	7,549	66,700
Primary Capability Modernization	4,709	7,549	66,700
Tritium and Domestic Uranium Enrichment	783	448	458
Production Modernization	5,492	7,997	67,158
Assessment Science	66,786	65,398	55,735
Engineering and Integrated Assessments	65,457	81,313	88,601
Inertial Confinement Fusion	63,100	65,957	65,644
Advanced Simulation and Computing	167,314	182,836	151,310
Weapons Technology and Manufacturing Maturation	62,099	78,715	121,000
Stockpile Research, Technology, and Engineering	424,756	474,219	482,290
Operations of Facilities	119,000	130,000	126,000
Safety and Environmental Operations	10,068	10,110	9,895
Maintenance and Repair of Facilities	11,000	19,000	46,000
Infrastructure and Safety	46,445	35,600	43,050
Capabilities Based Investments	18,991	10,482	16,410
Recapitalization	65,436	46,082	59,460
Operating	205,504	205,192	241,355
15-D-611, Emergency Operations Center, SNL	0	4,000	36,000
Mission Enabling	0	4,000	36,000
I&O - Construction	0	4,000	36,000
Infrastructure and Operations	205,504	209,192	277,355
STA Operations and Equipment	47,597	63,243	87,439
Secure Transportation Asset	47,597	63,243	87,439
Defense Nuclear Security (DNS)	65,884	67,088	67,175
Defense Nuclear Security	65,884	67,088	67,175
Information Technology and Cyber Security	24,888	26,888	26,888
Weapons Activities Programs	1,888,951	2,066,511	2,396,869
International Nuclear Security	13,858	12,127	13,853
Domestic Radiological Security	22,553	18,287	12,564
International Radiological Security	14,858	14,646	13,613
Nuclear Smuggling Detection and Deterrence	10,128	7,519	7,554
Global Material Security	61,397	52,579	47,584
Conversion (formerly HEU Reactor Conversion)	0	600	850
Material Disposition	2,415	0	500

DEPARTMENT OF ENERGY
Laboratory Table
Sandia National Laboratories FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Material Management and Minimization	2,415	600	1,350
Nonproliferation & Arms Control	8,111	9,900	9,808
National Technical Nuclear Forensics R&D	0	0	1,503
Proliferation Detection R&D	40,287	38,774	26,718
Nuclear Detonation Detection	105,528	80,232	90,020
Nonproliferation Fuels Development	517	0	0
Nonproliferation Stewardship Program	0	750	1,000
Defense Nuclear Nonproliferation R&D	146,332	119,756	117,738
Counterterrorism and Counterproliferation	43,182	48,476	50,415
Nuclear Counterterrorism & Incident Response	43,182	48,476	50,415
Defense Nuclear Nonproliferation Programs	261,437	231,311	228,398
Program Direction - National Nuclear Security Administration	22,878	24,623	23,481
Federal Salaries and Expenses Programs	22,878	24,623	23,481
Research - Advanced Scientific Computing Research	17,331	14,920	12,455
Advanced Scientific Computing Research	17,331	14,920	12,455
Research - Basic Energy Sciences	28,219	26,900	26,128
Basic Energy Sciences	28,219	26,900	26,128
Biological & Environmental Research	11,149	10,160	6,639
Research - Fusion Energy Sciences	1,265	1,669	1,614
Fusion Energy Sciences	1,265	1,669	1,614
Research - High Energy Physics	100	0	50
High Energy Physics	100	0	50
Workforce Development for Teachers & Scientists	130	0	0
Science Programs	58,194	53,649	46,886
Bioenergy Technologies	7,613	7,113	1,975
Building Technologies	0	1,100	0
Vehicle Technologies	13,000	13,000	4,000
Strategic Programs	750	300	0
Geothermal Technologies	5,720	2,981	775
Solar Energy Technologies	10,918	6,179	6,797
Water Power Technologies	7,608	7,779	2,310
Wind Energy Technologies	7,254	8,769	3,647
Hydrogen and Fuel Cells Technologies	7,542	9,135	3,000
Energy Efficiency and Renewable Energy Programs	60,405	56,356	22,504
Transmission Reliability and Resilience	3,812	2,500	2,500
Resilient Distribution Systems	4,379	2,100	2,100
Energy Storage Research	20,156	20,500	21,000
Energy Storage	20,156	20,500	21,000
Transformer Resilience and Advanced Components	525	525	550
Transmission Permitting and Technical Assistance	388	100	100
Electricity Programs	29,260	25,725	26,250
Cybersecurity for Energy Delivery Systems	1,600	1,800	2,123
Infrastructure Security and Energy Restoration	1,125	11,150	13,154
Cybersecurity, Energy Security, and Emergency Response Programs	2,725	12,950	15,277
Carbon Capture Utilization and Storage	350	812	459
Advanced Energy Systems	250	0	0
Cross Cutting Research	2,495	0	0
Advanced Coal Energy Systems & CCUS	3,095	812	459
Unconventional Fossil Energy from Petroleum - Oil Technologies	1,800	1,800	665
Natural Gas Technologies Research	566	502	171

DEPARTMENT OF ENERGY
Laboratory Table
Sandia National Laboratories FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Strategic Petroleum Reserve Management	3,652	3,294	3,822
Fossil Energy	9,113	6,408	5,117
Crosscutting Technology Development	1,868	1,875	1,875
Energy Innovation Hub for Modeling and Simulation	978	0	0
Nuclear Science User Facilities	0	50	50
NEAMS Joint Modeling and Simulation Program	100	0	0
Joint Modeling and Simulation Program	0	100	100
Nuclear Energy Enabling Technologies	2,946	2,025	2,025
Light Water Reactor Sustainability	1,285	1,285	825
Advanced Reactor Technologies	175	560	2,200
Reactors Concepts RD&D	1,460	1,845	3,025
Advanced Reactors Safeguards	0	4,000	2,000
Advanced Reactors Demonstration Program	0	4,000	2,000
Program Direction - Nuclear Energy	0	15	0
International Nuclear Energy Cooperation	15	0	0
STEP R&D	4,760	4,760	0
Fuel Cycle Research and Development	22,490	0	0
Fuel Cycle Laboratory R&D	0	1,024	500
Used Nuclear Fuel Disposition R&D	0	19,000	19,000
Integrated Waste Management System	0	4,750	0
Fuel Cycle Research and Development FCRD	22,490	24,774	19,500
Nuclear Energy Programs	31,671	37,419	26,550
Other Departmental Administration	552	175	175
Departmental Administration Programs	552	175	175
Environment, Health, Safety & Security	1,210	1,210	1,210
Environment, Health, Safety, and Security	1,210	1,210	1,210
Other Defense Activities Programs	1,210	1,210	1,210
Sandia National Laboratory (SNL)	2,600	2,652	4,860
NNSA Sites and Nevada Off-Sites	2,600	2,652	4,860
Defense Environmental Cleanup Programs	2,600	2,652	4,860
Total Sandia National Laboratories	2,368,996	2,518,989	2,797,577

DEPARTMENT OF ENERGY
Laboratory Table
Savannah River National Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Savannah River National Laboratory			
Research - Basic Energy Sciences	420	410	410
Basic Energy Sciences	420	410	410
Biological & Environmental Research	150	150	150
Research - Fusion Energy Sciences	0	400	400
Fusion Energy Sciences	0	400	400
Science Programs	570	960	960
Hydrogen and Fuel Cells Technologies	1,344	1,628	500
Energy Efficiency and Renewable Energy Programs	1,344	1,628	500
Transmission Reliability and Resilience	125	0	0
Resilient Distribution Systems	125	0	0
Transformer Resilience and Advanced Components	125	0	0
Electricity Programs	375	0	0
Versatile Advanced Test Reactor	0	500	0
Reactors Concepts RD&D	0	500	0
Fuel Cycle Research and Development	220	0	0
Fuel Cycle Research and Development FCRD	220	0	0
Nuclear Energy Programs	220	500	0
Other Departmental Administration	60	0	0
Departmental Administration Programs	60	0	0
Total Savannah River National Laboratory	2,569	3,088	1,460

DEPARTMENT OF ENERGY
Laboratory Table
Savannah River Operations Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Savannah River Operations Office			
Tritium and Domestic Uranium Enrichment	1,159	0	1,987
Production Modernization	1,159	0	1,987
Weapons Activities Programs	1,159	0	1,987
Nuclear Material Removal	1,496	150	350
Material Disposition	574	100	500
Material Management and Minimization	2,070	250	850
99-D-143, Mixed Oxide Fuel Fabrication Facility, SRS	233	0	0
Nonproliferation Construction	233	0	0
Defense Nuclear Nonproliferation Programs	2,303	250	850
Program Direction - National Nuclear Security Administration	6,971	7,899	8,519
Federal Salaries and Expenses Programs	6,971	7,899	8,519
Infrastructure Security and Energy Restoration	400	5,000	5,898
Cybersecurity, Energy Security, and Emergency Response Programs	400	5,000	5,898
Fuel Cycle Research and Development	3,996	0	0
Used Nuclear Fuel Disposition R&D	0	1,600	1,500
Integrated Waste Management System	0	2,900	0
Fuel Cycle Research and Development FCRD	3,996	4,500	1,500
Nuclear Energy Programs	3,996	4,500	1,500
Strategic Partnership Projects	6,700	6,700	6,700
Departmental Administration Programs	6,700	6,700	6,700
SR Community and Regulatory Support	11,249	11,249	4,989
Savannah River Sites	11,249	11,249	4,989
Program Direction - Defense Environmental Cleanup	44,080	44,410	41,280
Safeguards and Security - Defense Environmental Cleanup	163,357	174,152	171,211
Defense Environmental Cleanup Programs	218,686	229,811	217,480
Total Savannah River Operations Office	240,215	254,160	242,934

DEPARTMENT OF ENERGY
Laboratory Table
Savannah River Site FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Savannah River Site			
B61 Life Extension Program	5,000	3,000	6,500
W76 Life Extension Program	3,011	0	0
W76-2 Modification Program	813	0	0
W80-4 Life Extension Program	1,850	2,728	2,685
W87-1 Modification Program	0	500	20,000
Stockpile Major Modernization	10,674	6,228	29,185
Stockpile Sustainment	36,856	46,988	41,227
Weapons Dismantlement and Disposition	500	650	500
Production Operations	24,719	28,193	25,139
Stockpile Management	72,749	82,059	96,051
Savannah River Plutonium Operations	76,410	410,458	200,000
21-D-511, Savannah River Plutonium Processing Facility, SRS	0	0	241,896
Savannah River Plutonium Modernization	76,410	410,458	441,896
Plutonium Modernization	76,410	410,458	441,896
Primary Capability Modernization	76,410	410,458	441,896
Tritium and Domestic Uranium Enrichment	49,088	58,984	89,804
Production Modernization	125,498	469,442	531,700
Assessment Science	0	1,800	1,500
Engineering and Integrated Assessments	1,356	3,500	2,700
Weapons Technology and Manufacturing Maturation	5,446	5,753	7,350
Stockpile Research, Technology, and Engineering	6,802	11,053	11,550
Operations of Facilities	92,000	93,000	92,000
Safety and Environmental Operations	8,815	9,170	8,612
Maintenance and Repair of Facilities	34,500	31,000	55,000
Infrastructure and Safety	17,611	15,700	22,756
Capabilities Based Investments	0	320	7,500
Recapitalization	17,611	16,020	30,256
Operating	152,926	149,190	185,868
18-D-650, Tritium Finishing Facility, SRS	0	27,000	27,000
Programmatic	0	27,000	27,000
I&O - Construction	0	27,000	27,000
Infrastructure and Operations	152,926	176,190	212,868
Defense Nuclear Security (DNS)	7,537	7,688	7,841
Defense Nuclear Security	7,537	7,688	7,841
Information Technology and Cyber Security	6,786	6,786	6,786
Weapons Activities Programs	372,298	753,218	866,796
International Nuclear Security	0	108	124
Global Material Security	0	108	124
Conversion (formerly HEU Reactor Conversion)	0	2,700	4,700
Nuclear Material Removal	9,637	8,600	14,150
Material Disposition	111,706	28,850	47,250
Laboratory and Partnership Support	1,850	600	0
Material Management and Minimization	123,193	40,750	66,100
Nonproliferation & Arms Control	6,149	6,051	5,995
National Technical Nuclear Forensics R&D	0	0	1,503
Proliferation Detection R&D	4,628	6,079	5,982
Nuclear Detonation Detection	300	450	0
Nonproliferation Fuels Development	1,704	0	0

DEPARTMENT OF ENERGY
Laboratory Table
Savannah River Site FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Defense Nuclear Nonproliferation R&D	6,632	6,529	5,982
99-D-143, Mixed Oxide Fuel Fabrication Facility, SRS	75,602	80,000	0
Nonproliferation Construction	75,602	80,000	0
Counterterrorism and Counterproliferation	3,489	3,594	3,701
Nuclear Counterterrorism & Incident Response	3,489	3,594	3,701
Defense Nuclear Nonproliferation Programs	215,065	137,032	83,405
20-D-931, KL Fuel Development Laboratory	0	74,000	142,589
Construction - Naval Reactors	0	74,000	142,589
Naval Reactors Programs	0	74,000	142,589
Environment, Health, Safety & Security	10	10	10
Environment, Health, Safety, and Security	10	10	10
Other Defense Activities Programs	10	10	10
Savannah River Risk Management Operations	489,460	506,366	455,122
18-D-402 Emergency Operations Center Replacement, SR	1,259	6,792	0
Construction - Savannah River Sites	1,259	6,792	0
20-D-402 Advanced Manufacturing Collaborative Facility (AMC)	0	25,000	25,000
20-D-401 Saltstone Disposal Unit #10, 11, 12	0	500	0
19-D-701 SR Security Systems Replacement	10,000	4,525	0
18-D-402 Saltstone disposal unit #8/9	7,577	20,000	65,500
17-D-402 Saltstone Disposal Unit #7	41,243	40,034	10,716
05-D-405 Salt Waste Processing Facility, SRS	130,000	21,200	0
Construction - Radioactive Liquid Tank Waste	188,820	111,259	101,216
Radioactive Liquid Tank Waste Stabilization	696,869	820,106	970,332
Savannah River Sites	1,376,408	1,444,523	1,526,670
Defense Environmental Cleanup Programs	1,376,408	1,444,523	1,526,670
Total Savannah River Site	1,963,781	2,408,783	2,619,470

DEPARTMENT OF ENERGY
Laboratory Table
Savannah River Site Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Savannah River Site Office			
Information Technology and Cyber Security	50	200	100
Weapons Activities Programs	50	200	100
Environment, Health, Safety & Security	500	500	500
Environment, Health, Safety, and Security	500	500	500
Other Defense Activites Programs	500	500	500
Total Savannah River Site Office	550	700	600

DEPARTMENT OF ENERGY
Laboratory Table
 Separations Process Research Unit FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Separations Process Research Unit			
Separations Processing Research Unit	15,000	15,300	15,000
NNSA Sites and Nevada Off-Sites	15,000	15,300	15,000
Defense Environmental Cleanup Programs	15,000	15,300	15,000
Total Separations Process Research Unit	15,000	15,300	15,000

DEPARTMENT OF ENERGY
Laboratory Table
SLAC National Accelerator Laboratory FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
SLAC National Accelerator Laboratory			
Assessment Science	90	210	0
Inertial Confinement Fusion	0	0	180
Stockpile Research, Technology, and Engineering	90	210	180
Weapons Activities Programs	90	210	180
National Technical Nuclear Forensics R&D	0	0	1,387
Proliferation Detection R&D	1,275	1,200	1,181
Nuclear Detonation Detection	487	415	0
Defense Nuclear Nonproliferation R&D	1,762	1,615	1,181
Defense Nuclear Nonproliferation Programs	1,762	1,615	2,568
Research - Advanced Scientific Computing Research	1,366	1,170	670
Advanced Scientific Computing Research	1,366	1,170	670
Research - Basic Energy Sciences	232,553	231,945	226,323
18-SC-13, Linac Coherent Light Source-II-High Energy (LCLS-II-HE), SLAC	28,000	50,000	14,000
13-SC-10, Linac Coherent Light Source-II (LCLS-II), SLAC	129,300	0	0
Construction - Basic Energy Sciences	157,300	50,000	14,000
Basic Energy Sciences	389,853	281,945	240,323
Biological & Environmental Research	7,394	4,100	3,600
Research - Fusion Energy Sciences	2,340	6,800	5,000
20-SC-61, Matter in Extreme Conditions (MEC) Upgrade (TEC)	0	15,000	5,000
Construction - Fusion Energy Sciences	0	15,000	5,000
Fusion Energy Sciences	2,340	21,800	10,000
Research - High Energy Physics	64,007	66,589	57,496
High Energy Physics	64,007	66,589	57,496
Operations and Maintenance - Nuclear Physics	1,015	1,336	1,005
Nuclear Physics	1,015	1,336	1,005
Workforce Development for Teachers & Scientists	460	0	0
Facilities and Infrastructure (SLI)	9,400	0	0
20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75)	0	11,000	8,000
20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81)	0	500	2,000
Construction - Science Laboratories Infrastructure	0	11,500	10,000
Science Laboratories Infrastructure	9,400	11,500	10,000
Safeguards and Security - SC	4,304	4,328	4,328
Science Programs	480,139	392,768	327,422
Building Technologies	0	567	0
Vehicle Technologies	4,500	5,200	1,500
Solar Energy Technologies	2,445	1,998	591
Hydrogen and Fuel Cells Technologies	50	61	50
Energy Efficiency and Renewable Energy Programs	6,995	7,826	2,141
Transmission Reliability and Resilience	400	0	0
Resilient Distribution Systems	1,175	500	0
Energy Storage Research	100	0	0
Energy Storage	100	0	0
Electricity Programs	1,675	500	0
Unconventional Fossil Energy from Petroleum - Oil Technologies	252	252	93
Natural Gas Technologies Research	1,150	934	311
Fossil Energy	1,402	1,186	404
Other Departmental Administration	27	0	0
Departmental Administration Programs	27	0	0

DEPARTMENT OF ENERGY
Laboratory Table
SLAC National Accelerator Laboratory FY 2021
(Dollars in Thousands)

FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
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Total SLAC National Accelerator Laboratory	492,090	404,105	332,715
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DEPARTMENT OF ENERGY
Laboratory Table
Southeastern Power Administration Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Southeastern Power Administration Office			
Purchase Power and Wheeling - SEPA	68,824	70,704	85,401
Program Direction - SEPA	6,500	6,597	11,246
Southeastern Power Administration Programs	75,324	77,301	96,647
Total Southeastern Power Administration Office	75,324	77,301	96,647

DEPARTMENT OF ENERGY
Laboratory Table
Southwestern Power Administration Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Southwestern Power Administration Office			
Resilient Distribution Systems	0	6,750	2,250
Electricity Programs	0	6,750	2,250
Operation And Maintenance - SWPA	17,006	13,639	13,292
Construction - SWPA	16,875	15,067	13,267
Purchase Power And Wheeling - SWPA	60,000	68,000	95,000
Program Direction - SWPA	32,995	35,157	35,635
Subtotal, SWPA	126,876	131,863	157,194
Southwestern Power Administration Programs	126,876	131,863	157,194
Total Southwestern Power Administration Office	126,876	138,613	159,444

DEPARTMENT OF ENERGY
Laboratory Table
Stanford Site Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Stanford Site Office			
Program Direction - SC	2,476	0	0
Science Programs	2,476	0	0
Total Stanford Site Office	2,476	0	0

DEPARTMENT OF ENERGY
Laboratory Table
 Strategic Petroleum Reserve - Bayou Choctow FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Strategic Petroleum Reserve - Bayou Choctow			
Strategic Petroleum Reserve Management	13,523	13,806	15,851
Fossil Energy	13,523	13,806	15,851
Total Strategic Petroleum Reserve - Bayou Choctow	13,523	13,806	15,851

DEPARTMENT OF ENERGY
Laboratory Table
 Strategic Petroleum Reserve - Big Hill FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Strategic Petroleum Reserve - Big Hill			
Storage Facilities Development	22,176	19,276	23,581
Fossil Energy	22,176	19,276	23,581
Total Strategic Petroleum Reserve - Big Hill	22,176	19,276	23,581

DEPARTMENT OF ENERGY
Laboratory Table
 Strategic Petroleum Reserve - Bryan Mound FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Strategic Petroleum Reserve - Bryan Mound			
Storage Facilities Development	25,473	21,139	17,358
Fossil Energy	25,473	21,139	17,358
Total Strategic Petroleum Reserve - Bryan Mound	25,473	21,139	17,358

DEPARTMENT OF ENERGY
Laboratory Table
 Strategic Petroleum Reserve - West Hackberry FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Strategic Petroleum Reserve - West Hackberry			
Storage Facilities Development	24,093	22,299	20,770
Fossil Energy	24,093	22,299	20,770
Total Strategic Petroleum Reserve - West Hackberry	24,093	22,299	20,770

DEPARTMENT OF ENERGY
Laboratory Table
 Strategic Petroleum Reserve Project Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Strategic Petroleum Reserve Project Office			
Program Direction - Naval Petroleum & Oil Shale Reserve	10,000	10,000	0
Storage Facilities Development	107,637	105,720	96,239
Fossil Energy	117,637	115,720	96,239
Total Strategic Petroleum Reserve Project Office	117,637	115,720	96,239

DEPARTMENT OF ENERGY
Laboratory Table
Thomas Jefferson National Accelerator Facility FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Thomas Jefferson National Accelerator Facility			
Research - Advanced Scientific Computing Research	387	382	360
Advanced Scientific Computing Research	387	382	360
Research - High Energy Physics	350	750	400
High Energy Physics	350	750	400
Operations and Maintenance - Nuclear Physics	129,017	133,267	128,609
Nuclear Physics	129,017	133,267	128,609
Workforce Development for Teachers & Scientists	200	0	0
20-SC-73, CEBAF Renovation and Expansion, TJNAF (19-SC-73)	0	2,000	2,000
Construction - Science Laboratories Infrastructure	0	2,000	2,000
Science Laboratories Infrastructure	0	2,000	2,000
Safeguards and Security - SC	3,021	3,037	3,037
Science Programs	132,975	139,436	134,406
Other Departmental Administration	30	30	30
Departmental Administration Programs	30	30	30
Total Thomas Jefferson National Accelerator Facility	133,005	139,466	134,436

DEPARTMENT OF ENERGY
Laboratory Table
 Thomas Jefferson Site Office FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Thomas Jefferson Site Office			
Program Direction - SC	1,971	2,148	2,241
Science Programs	1,971	2,148	2,241
Total Thomas Jefferson Site Office	1,971	2,148	2,241

DEPARTMENT OF ENERGY
Laboratory Table
 University of Rochester FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
University of Rochester			
Inertial Confinement Fusion	80,000	76,480	75,000
Stockpile Research, Technology, and Engineering	80,000	76,480	75,000
Weapons Activities Programs	80,000	76,480	75,000
Total University of Rochester	80,000	76,480	75,000

DEPARTMENT OF ENERGY
Laboratory Table
Washington Headquarters FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Washington Headquarters			
B61 Life Extension Program	8,306	8,019	8,150
W76-2 Modification Program	0	3,606	0
W88 Alteration Program	3,183	3,077	4,978
W80-4 Life Extension Program	6,849	9,090	15,005
W87-1 Modification Program	554	1,133	16,230
W93	0	0	1,590
Stockpile Major Modernization	18,892	24,925	45,953
Stockpile Sustainment	31,756	13,193	41,135
Weapons Dismantlement and Disposition	0	567	1,500
Production Operations	12,471	14,079	17,068
Stockpile Management	63,119	52,764	105,656
Savannah River Plutonium Operations	7,875	19,471	42,962
Savannah River Plutonium Modernization	7,875	19,471	42,962
Plutonium Modernization	7,875	19,471	42,962
Primary Capability Modernization	7,875	19,471	42,962
Secondary Capability Modernization	15,858	31,259	67,431
Tritium and Domestic Uranium Enrichment	68,558	96,448	89,983
Production Modernization	92,291	147,178	200,376
Assessment Science	17,219	16,627	60,014
Engineering and Integrated Assessments	3,106	3,325	5,134
Inertial Confinement Fusion	7,111	7,851	42,755
Advanced Simulation and Computing	119,802	69,663	218,626
Weapons Technology and Manufacturing Maturation	2,526	2,662	4,469
Stockpile Research, Technology, and Engineering	149,764	100,128	330,998
Operations of Facilities	9,000	25,000	14,000
Safety and Environmental Operations	9,129	38,361	17,434
Maintenance and Repair of Facilities	89,500	69,000	146,000
Infrastructure and Safety	36,860	52,697	209,185
Capabilities Based Investments	16,412	15,898	28,017
Planning for Programmatic Construction (Pre-CD-1)	0	0	84,787
Recapitalization	53,272	68,595	321,989
Operating	160,901	200,956	499,423
Infrastructure and Operations	160,901	200,956	499,423
Program Direction - STA - Federal Support	102,022	107,660	123,684
Secure Transportation Asset	102,022	107,660	123,684
Defense Nuclear Security (DNS)	30,321	88,107	117,141
Defense Nuclear Security	30,321	88,107	117,141
Information Technology and Cyber Security	124,070	189,745	265,356
Legacy Contractor Pensions (WA)	162,292	91,200	101,668
Weapons Activities Programs	884,780	977,738	1,744,302
International Nuclear Security	1,488	6,442	7,459
Domestic Radiological Security	611	28,981	19,911
International Radiological Security	1	9,045	8,406
Nuclear Smuggling Detection and Deterrence	526	5,103	5,127
Global Material Security	2,626	49,571	40,903
Conversion (formerly HEU Reactor Conversion)	0	6,646	57,500
Nuclear Material Removal	684	1,000	0
Material Disposition	2,804	72,358	17,817

DEPARTMENT OF ENERGY
Laboratory Table
Washington Headquarters FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Laboratory and Partnership Support	644	40,333	0
Material Management and Minimization	4,132	120,337	75,317
Nonproliferation & Arms Control	8,641	12,384	12,269
Proliferation Detection R&D	13,229	21,151	20,812
Nuclear Detonation Detection	2,660	16,406	11,208
Defense Nuclear Nonproliferation R&D	15,889	37,557	32,020
99-D-143, Mixed Oxide Fuel Fabrication Facility, SRS	135,582	110,000	0
Nonproliferation Construction	135,582	110,000	0
Emergency Operations	13,980	12,306	12,564
Counterterrorism and Counterproliferation	62,548	68,293	40,867
Nuclear Counterterrorism & Incident Response	76,528	80,599	53,431
Legacy Contractor Pensions (DNN)	28,640	13,700	14,348
Defense Nuclear Nonproliferation Programs	272,038	424,148	228,288
Naval Reactors Development	1,591	1,908	1,955
Naval Reactors Operations and Infrastructure	9,391	9,663	9,953
Program Direction - Naval Reactors	29,225	30,300	32,220
20-D-931, KL Fuel Development Laboratory	0	2,250	3,500
Construction - Naval Reactors	0	2,250	3,500
Naval Reactors Programs	40,207	44,121	47,628
Program Direction - National Nuclear Security Administration	296,331	311,384	330,664
Federal Salaries and Expenses Programs	296,331	311,384	330,664
Research - Advanced Scientific Computing Research	68,955	134,008	223,208
Advanced Scientific Computing Research	68,955	134,008	223,208
Research - Basic Energy Sciences	147,264	165,937	142,591
21-SC-10, Cryomodule Repair and Maintenance Facility, SLAC	0	0	1,000
Construction - Basic Energy Sciences	0	0	1,000
Basic Energy Sciences	147,264	165,937	143,591
Biological & Environmental Research	28,135	120,993	75,327
Research - Fusion Energy Sciences	130,512	168,768	92,809
Fusion Energy Sciences	130,512	168,768	92,809
Research - High Energy Physics	98,473	156,285	150,042
High Energy Physics	98,473	156,285	150,042
Operations and Maintenance - Nuclear Physics	106,013	105,916	110,594
Nuclear Physics	106,013	105,916	110,594
Workforce Development for Teachers & Scientists	0	28,000	20,500
Facilities and Infrastructure (SLI)	0	38,578	6,000
Science Laboratories Infrastructure	0	38,578	6,000
Safeguards and Security - SC	4,583	11,669	14,592
Program Direction - SC	92,066	97,902	101,403
Science Programs	676,001	1,028,056	938,066
Bioenergy Technologies	18,413	31,463	6,225
Building Technologies	64,556	54,945	24,500
State Energy Program Grants	1,633	2,100	0
Weatherization Assistance Program	145	6,765	0
Weatherization and Intergovernmental Programs	1,778	8,865	0
Program Direction - Energy Efficiency and Renewable Energy	130,570	129,556	104,163
Advanced Manufacturing	157,630	34,204	8,270
Federal Energy Management Program	4,745	6,221	2,200
Vehicle Technologies	0	59,500	4,000
Strategic Programs	5,000	4,300	500

DEPARTMENT OF ENERGY
Laboratory Table
Washington Headquarters FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Geothermal Technologies	4,972	20,839	11,275
Solar Energy Technologies	42,073	69,954	14,040
Water Power Technologies	11,130	37,876	14,674
Wind Energy Technologies	18,912	16,329	2,670
Hydrogen and Fuel Cells Technologies	8,734	10,578	1,400
Energy Efficiency and Renewable Energy Programs	468,513	484,630	193,917
Transmission Reliability and Resilience	237	300	300
Resilient Distribution Systems	648	450	200
Energy Storage Research	361	300	300
Energy Storage	361	300	300
Transformer Resilience and Advanced Components	812	432	322
DCEI Energy Mission Assurance	0	0	825
Transmission Permitting and Technical Assistance	2,547	3,315	3,315
Program Direction - Electricity	13,967	14,320	15,831
Electricity Programs	18,572	19,117	21,093
Cybersecurity for Energy Delivery Systems	20,575	10,700	12,623
Infrastructure Security and Energy Restoration	8,060	11,500	13,566
Program Direction - CESER	8,516	8,698	10,261
Cybersecurity, Energy Security, and Emergency Response Programs	37,151	30,898	36,450
STEP Supercritical CO2	0	14,000	0
CCS and Power Systems	0	14,000	0
Carbon Capture Utilization and Storage	115,596	175,070	98,869
Advanced Energy Systems	95,881	101,407	217,620
Cross Cutting Research	7,400	37,302	49,673
Advanced Coal Energy Systems & CCUS	218,877	313,779	366,162
Program Direction - Fossil Energy	31,605	31,353	31,661
Special Recruitment Programs	700	700	900
Import Export Authorization	2,235	2,367	2,380
Unconventional Fossil Energy from Petroleum - Oil Technologies	858	858	317
Natural Gas Technologies Research	23,597	24,505	7,300
Program Direction - Naval Petroleum & Oil Shale Reserve	2,000	2,000	2,006
Strategic Petroleum Reserve Management	8,430	8,430	8,402
Northeast Home Heating Oil Reserves	962	962	0
Fossil Energy	289,264	398,954	419,128
Crosscutting Technology Development	20,932	7,650	15,325
Energy Innovation Hub for Modeling and Simulation	3,155	0	0
Nuclear Science User Facilities	1,715	2,027	1,900
NEAMS Joint Modeling and Simulation Program	8,577	0	0
Transformational Challenge Reactor	0	3,000	4,000
Joint Modeling and Simulation Program	0	9,170	1,766
Nuclear Energy Enabling Technologies	34,379	21,847	22,991
Light Water Reactor Sustainability	13,457	13,545	4,625
Advanced Reactor Technologies	19,150	3,000	6,000
Versatile Advanced Test Reactor	3,479	8,580	0
Advanced SMR R&D	18,792	11,305	1,000
Reactors Concepts RD&D	54,878	36,430	11,625
Other Project Costs	0	0	33,000
21-E-200, VTR Project	0	0	262,000
Versatile Test Reactor Project	0	0	295,000
National Reactor Innovation Center	0	500	250

DEPARTMENT OF ENERGY
Laboratory Table
Washington Headquarters FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Demonstration 1	0	500	0
Demonstration 2	0	500	0
Risk Reduction for Future Demonstration	0	500	0
Advanced Reactors Safeguards	0	1,000	500
Advanced Reactors Demonstration Program	0	3,000	750
Research Reactor Infrastructure	7	29	15
Oak Ridge Nuclear Infrastructure	15	43	0
Radiological Facilities Management	22	72	15
INL Operations and Infrastructure	595	1,036	500
Idaho Facilities Management	595	1,036	500
Safeguards and Security - Nuclear Energy	252	397	350
Idaho Site-wide Safeguards and Security	252	397	350
Program Direction - Nuclear Energy	43,571	42,145	39,015
Integrated University Program	0	16	0
International Nuclear Energy Cooperation	109	0	0
STEP R&D	240	240	0
Mining, Conversion, and Transportation	0	1,100	1,100
Fuel Cycle Research and Development Mining and Conversion FCRD	0	1,100	1,100
Materials Recovery and Waste Form Development (MRWFD)	0	7,115	2,846
Material recovery and waste form development	0	7,115	2,846
Accident Tolerant Fuels	0	19,805	7,458
Triso Fuel and Graphite Qualification	0	7,650	8,670
Total Advanced Fuels	0	27,455	16,128
Fuel Cycle Research and Development	15,754	0	0
Fuel Cycle Laboratory R&D	0	3,974	746
Used Nuclear Fuel Disposition R&D	0	9,000	9,000
Fuel Cycle Research and Development FCRD	15,754	48,644	29,820
Nuclear Energy Programs	149,800	153,827	400,066
Office Of The Secretary	5,395	5,119	5,382
Congressional and Intergovernmental Affairs	4,200	4,395	5,616
Office of the Chief Financial Officer	48,912	52,000	53,591
Economic Impact & Diversity	10,169	10,169	9,629
Office of International Affairs	0	26,825	0
Chief Information Officer	131,624	140,200	134,778
Other Departmental Administration	166,950	143,494	159,982
Strategic Partnership Projects	0	0	6,722
Departmental Administration Programs	367,250	382,202	375,700
Program Direction - Environment, Health, Safety and Security	69,000	71,000	75,140
Environment, Health, Safety & Security	117,320	120,320	118,029
Environment, Health, Safety, and Security	186,320	191,320	193,169
Program Direction - Office of Enterprise Assessments	52,702	54,711	54,635
Enterprise Assessments	23,918	23,918	26,799
Office of Enterprise Assessments	76,620	78,629	81,434
Other Defense Activities Programs	262,940	269,949	274,603
Indian Energy Policy & Programs	4,350	21,550	7,555
Indian Energy Policy and Programs (IEPP)	4,350	21,550	7,555
ARPA-E Projects	334,750	390,000	0
Program Direction - ARPA-E	31,250	35,000	21,256
Advanced Research Projects Agency - Energy Programs	366,000	425,000	21,256
Energy Information Administration (EIA)	125,000	126,800	128,710

DEPARTMENT OF ENERGY
Laboratory Table
Washington Headquarters FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Loan Guarantee Program	32,918	31,850	3,000
Title XVII Loan Guarantee Programs	32,918	31,850	3,000
Administrative Expenses - Tribal Energy Loan Guarantee Program	1,000	2,000	0
Tribal Energy Loan Guarantee Programs	1,000	2,000	0
Advanced Technology Vehicle Manufacturing Loan Program	4,700	5,000	0
Advanced Technology Vehicles Manufacturing Loan Programs	4,700	5,000	0
Program Direction - Defense Environmental Cleanup	83,726	74,347	74,042
Program Support - Defense Environmental Cleanup	12,979	12,979	12,979
Technology Development and Deployment	25,000	25,000	25,000
Defense Environmental Cleanup Programs	121,705	112,326	112,021
Management and Storage of Elemental Mercury	0	1,200	0
Non-Defense Environmental Cleanup Programs	0	1,200	0
Uranium Enrichment D&D Fund-U Th Reimbursements	11,000	5,250	21,284
Uranium Enrichment D&D Programs	11,000	5,250	21,284
Program Direction - Office of Inspector General	51,330	54,215	57,739
Inspector General Programs	51,330	54,215	57,739
Just and Reasonable Rates, Terms, and Conditions	171,318	176,468	182,261
Safe, Reliable, Secure, & Efficient Infrastructure	130,090	132,286	142,757
Mission Support through Organizational Excellence	68,492	73,246	79,332
Federal Energy Regulatory Commission Programs	369,900	382,000	404,350
Program Direction - AITO	0	0	4,912
Artificial Intelligence Technology Office Programs	0	0	4,912
International Affairs Program Direction	0	0	32,959
International Affairs Programs	0	0	32,959
Uranium Reserve Program	0	0	150,000
Uranium Reserve Programs	0	0	150,000
Interim Storage & Nuclear Waste Fund Oversight	0	0	15,000
Interim Storage Programs	0	0	15,000
Total Washington Headquarters	4,850,750	5,692,215	5,968,691

DEPARTMENT OF ENERGY
Laboratory Table
Waste Isolation Pilot Plant FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Waste Isolation Pilot Plant			
Material Disposition	9,722	2,240	4,300
Material Management and Minimization	9,722	2,240	4,300
Nonproliferation & Arms Control	325	427	423
Counterterrorism and Counterproliferation	37	39	40
Nuclear Counterterrorism & Incident Response	37	39	40
Defense Nuclear Nonproliferation Programs	10,084	2,706	4,763
Waste Isolation Pilot Plant (WIPP)	311,695	294,353	323,260
21-D-401 Hoisting Capability Project	0	0	10,000
15-D-411 Safety Significant Confinement Ventilation System, WIPP	84,212	58,054	0
15-D-412 Exhaust Shaft, WIPP	1,000	44,500	50,000
Total Waste Isolation Pilot Plant	396,907	396,907	383,260
Defense Environmental Cleanup Programs	396,907	396,907	383,260
Total Waste Isolation Pilot Plant	406,991	399,613	388,023

DEPARTMENT OF ENERGY
Laboratory Table
 West Valley Demonstration Project FY 2021
 (Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
West Valley Demonstration Project			
Safeguards and Security - Defense Environmental Cleanup	3,133	4,196	4,298
Defense Environmental Cleanup Programs	3,133	4,196	4,298
West Valley Demonstration Project - NDEC	75,000	75,215	88,113
Community and Regulatory Support	0	200	0
Non-Defense Environmental Cleanup Programs	75,000	75,415	88,113
Total West Valley Demonstration Project	78,133	79,611	92,411

DEPARTMENT OF ENERGY
Laboratory Table
Western Area Power Administration Office FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Western Area Power Administration Office			
Transmission Reliability and Resilience	250	0	0
Resilient Distribution Systems	350	0	0
Transformer Resilience and Advanced Components	150	0	0
Electricity Programs	750	0	0
Cybersecurity for Energy Delivery Systems	155	0	0
Infrastructure Security and Energy Restoration	0	1,000	1,180
Cybersecurity, Energy Security, and Emergency Response Programs	155	1,000	1,180
System Operation And Maintenance - CROM	77,056	72,176	77,874
Construction And Rehabilitation - CROM	32,632	45,887	26,251
Program Direction - CROM	238,483	250,091	253,575
Construction, Rehabilitation, Operation, and Maintenance (CROM) - WP	348,171	368,154	357,700
Western Area Power Administration Programs	348,171	368,154	357,700
Program Direction - Colorado River Basins Fund	62,948	67,112	70,316
Equipment, Contracts and Related Expenses - Colorado River Basins Fund	157,389	153,132	174,731
Colorado River Basins Fund	220,337	220,244	245,047
Colorado River Basins Power Marketing Fund (CRBPMF) Programs	220,337	220,244	245,047
Total Western Area Power Administration Office	569,413	589,398	603,927

DEPARTMENT OF ENERGY
Laboratory Table
Y-12 National Security Complex FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Y-12 National Security Complex			
B61 Life Extension Program	94,030	55,307	92,000
W76-2 Modification Program	57,253	0	0
W88 Alteration Program	5,268	8,608	4,123
W80-4 Life Extension Program	21,800	52,478	63,164
W87-1 Modification Program	500	4,000	45,000
W93	0	0	500
Stockpile Major Modernization	178,851	120,393	204,787
Stockpile Sustainment	45,941	45,828	36,673
Weapons Dismantlement and Disposition	10,000	10,000	11,500
Production Operations	112,518	104,709	108,738
Stockpile Management	347,310	280,930	361,698
Secondary Capability Modernization	217,328	249,006	370,860
Tritium and Domestic Uranium Enrichment	26,472	25,000	21,667
Production Modernization	243,800	274,006	392,527
Engineering and Integrated Assessments	2,332	3,486	6,181
Advanced Simulation and Computing	500	500	0
Weapons Technology and Manufacturing Maturation	4,483	8,104	12,800
Stockpile Research, Technology, and Engineering	7,315	12,090	18,981
Operations of Facilities	104,000	99,000	109,000
Safety and Environmental Operations	21,800	14,275	22,095
Maintenance and Repair of Facilities	100,000	95,000	132,000
Infrastructure and Safety	79,957	73,823	76,547
Capabilities Based Investments	9,100	11,910	19,400
Recapitalization	89,057	85,733	95,947
Operating	314,857	294,008	359,042
18-D-690, Lithium Processing Facility, Y-12	19,000	32,000	109,405
06-D-141, Uranium Processing Facility, Y-12	703,000	745,000	750,000
Programmatic	722,000	777,000	859,405
I&O - Construction	722,000	777,000	859,405
Infrastructure and Operations	1,036,857	1,071,008	1,218,447
STA Operations and Equipment	5	0	0
Secure Transportation Asset	5	0	0
Defense Nuclear Security (DNS)	167,532	167,465	173,815
17-D-710, West End Protected Area Reduction Project, Y-12	0	25,000	11,000
Construction - Defense Nuclear Security	0	25,000	11,000
Defense Nuclear Security	167,532	192,465	184,815
Information Technology and Cyber Security	7,572	7,572	7,572
Weapons Activities Programs	1,810,391	1,838,071	2,184,040
International Nuclear Security	1,696	2,970	3,413
Domestic Radiological Security	19,050	14,492	9,957
International Radiological Security	438	370	344
Global Material Security	21,184	17,832	13,714
Conversion (formerly HEU Reactor Conversion)	0	800	2,045
Nuclear Material Removal	2,987	5,675	3,100
Material Disposition	22,047	8,600	22,696
Laboratory and Partnership Support	1,514	360	0
Material Management and Minimization	26,548	15,435	27,841
Nonproliferation & Arms Control	3,116	4,094	4,057

DEPARTMENT OF ENERGY
Laboratory Table
Y-12 National Security Complex FY 2021
(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
National Technical Nuclear Forensics R&D	0	0	2,272
Proliferation Detection R&D	5,735	7,434	7,315
Nuclear Detonation Detection	810	680	0
Nonproliferation Fuels Development	1,248	0	0
Defense Nuclear Nonproliferation R&D	7,793	8,114	7,315
Counterterrorism and Counterproliferation	2,938	3,026	3,117
Nuclear Counterterrorism & Incident Response	2,938	3,026	3,117
Defense Nuclear Nonproliferation Programs	61,579	48,501	58,316
Facilities and Infrastructure (SLI)	1,250	0	0
Science Laboratories Infrastructure	1,250	0	0
Science Programs	1,250	0	0
Total Y-12 National Security Complex	1,873,220	1,886,572	2,242,356

DEPARTMENT OF ENERGY

Laboratory Table

Y-12 Site Office FY 2021

(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Y-12 Site Office			
Environment, Health, Safety & Security	20	20	20
Environment, Health, Safety, and Security	20	20	20
Other Defense Activities Programs	20	20	20
17-D-401 On-site Waste Disposal Facility	10,000	0	22,380
14-D-403 Outfall 200 Mercury Treatment Facility	76,000	70,000	20,500
Construction - Oak Ridge	86,000	70,000	42,880
OR Technology Development and Deployment	3,000	5,000	3,000
Oak Ridge (OR)	89,000	75,000	45,880
Defense Environmental Cleanup Programs	89,000	75,000	45,880
Total Y-12 Site Office	89,020	75,020	45,900

DEPARTMENT OF ENERGY

Laboratory Table

Grants FY 2021

(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
Grants			
Safety and Environmental Operations	0	0	436
Operating	0	0	436
Infrastructure and Operations	0	0	436
Weapons Activities Programs	0	0	436
Research - Advanced Scientific Computing Research	16,885	17,464	15,060
Advanced Scientific Computing Research	16,885	17,464	15,060
Research - Basic Energy Sciences	130,450	136,457	136,457
Basic Energy Sciences	130,450	136,457	136,457
Biological & Environmental Research	152,059	115,033	92,545
Research - Fusion Energy Sciences	119,407	96,324	82,034
Fusion Energy Sciences	119,407	96,324	82,034
Research - High Energy Physics	87,455	95,107	81,587
High Energy Physics	87,455	95,107	81,587
Operations and Maintenance - Nuclear Physics	20,071	28,500	25,620
14-SC-50, Facility for Rare Isotope Beams, MSU	75,000	40,000	5,300
Construction - Nuclear Physics	75,000	40,000	5,300
Nuclear Physics	95,071	68,500	30,920
Science Programs	601,327	528,885	438,603
State Energy Program Grants	49,000	56,000	0
Weatherization Assistance Program	253,500	297,120	0
Weatherization and Intergovernmental Programs	302,500	353,120	0
Energy Efficiency and Renewable Energy Programs	302,500	353,120	0
Transmission Reliability and Resilience	3,720	7,781	7,542
Resilient Distribution Systems	8,864	9,143	668
Energy Storage Research	1,871	10,362	1,416
Energy Storage	1,871	10,362	1,416
Transformer Resilience and Advanced Components	1,093	243	328
Transmission Permitting and Technical Assistance	1,710	1,250	1,250
Program Direction - Electricity	760	697	696
Electricity Programs	18,018	29,476	11,900
Indian Energy Policy & Programs	13,350	150	150
Indian Energy Policy and Programs (IEPP)	13,350	150	150
Total Grants	935,195	911,631	451,089

DEPARTMENT OF ENERGY

Laboratory Table

No LPI FY 2021

(Dollars in Thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request Detail
No LPI			
Transmission Reliability and Resilience	4	19	8
Resilient Distribution Systems	854	306	432
Energy Storage Research	200	5,338	784
Energy Storage	200	5,338	784
DCEI Energy Mission Assurance	0	0	825
Electricity Programs	1,057	5,663	2,049
Northeast Gasoline Supply Reserve	29,000	0	0
Northeast Home Heating Oil Reserves	9,038	9,038	0
Fossil Energy	38,038	9,038	0
Other Departmental Administration	0	5,000	0
Departmental Administration Programs	0	5,000	0
Total No LPI	39,095	19,701	2,049