	FY 2018	FY 2019	FY 2020	FY 2020 Red	
	Total Enacted	Enacted	Congressional	FY 2019 Er	nacted %
scretionary Summary by Appropriation	Approp.	Approp.	Request	Φ	70
Energy and Water Development and Related Agencies					
Appropriation Summary:					
Energy Programs					
Energy efficiency and renewable energy	2,321,778	2,379,000	343,000	-2,036,000	-85.6
Electricity delivery and energy reliability	261,329	_,		0	N
Electricity (Delivery)	201,020	156,000	182,500	+26,500	+17.0
Cybersecurity, Energy Security, and Emergency Response		120,000	156,500	+36,500	+30.4
		,	,	-502,090	-37.9
Nuclear energy	1,205,056	1,326,090	824,000	-302,090	-31.3
Fossil energy programs					
Fossil energy research and development	726,817	740,000	562,000	-178,000	-24.
Fossil Energy Petroleum Reserves:					
Naval petroleum and oil shale reserves	4,900	10,000	14,000	+4,000	+40
Strategic petroleum reserve	260,716	235,000	174,000	-61,000	-26
· · · · · · · · · · · · · · · · · · ·					
SPR petroleum account <sup>1</sup>	8,400	10,000	27,000	+17,000	+170
Northeast home heating oil reserve		10,000		-10,000	-100
Total, Fossil Energy Petroleum Reserves <sup>1</sup>	280,516	265,000	215,000	-50,000	-18
Total, Fossil energy programs	1,007,333	1,005,000	777,000	-228,000	-22
		<b></b>		40	
Uranium enrichment D&D fund	840,000	841,129	715,112	-126,017	-15
Energy information administration	125,000	125,000	118,000	-7,000	-5
Non-Defense environmental cleanup	298,400	310,000	247,480	-62,520	-20
Science	6,259,903	6,585,000	5,545,972	-1,039,028	-15
Advanced research projects agency - Energy	353,314	366,000	-287,000	-653,000	-178
Nuclear waste disposal (26M in DNWF 050)			90,000	+90,000	
Departmental administration	189,652	165.858	117,545	-48,313	-29
Indian energy policy and programs		18,000	8,000	-10,000	-55
	49,000	51,330	54,215	+2,885	+5
Inspector general.				,	Τ:
International affairs			36,100	+36,100	
Credit Programs					
Title 17 - Innovative technology					
loan guarantee program	30,892	13,000	-160,659	-173,659	-1,335
Advanced technology vehicles manufacturing					
loan program	5,000	5,000		-5,000	-100
Tribal energy loan guarantee program	1,000	1,000	-8,500	-9,500	-950
Total, Credit Programs	36,892	19,000	-169,159	-188,159	-990
Total, Energy Programs	12,947,657	13,467,407	8,759,265	-4,708,142	-35
Atomic Energy Defense Activities					
National nuclear security administration:					
Federal Salaries and Expenses	407,595	410,000	434,699	+24,699	+6
Weapons activities	10,642,138	11,100,000	12,408,603	+1,308,603	+11
Defense nuclear nonproliferation.	1,999,219	1,930,000	1,993,302	+63,302	+3
Naval reactors		1,788,618	1,648,396	-140,222	-7
Total, National nuclear security administration.	14,668,952	15,228,618	16,485,000	+1,256,382	+8
,	,000,002	,==5,010	,,	.,200,002	
Environmental and other defense activities:					
Defense environmental cleanup	5,988,048	6,024,000	5,506,501	-517,499	-8
Other defense activities	840,000	860,292	1,035,339	+175,047	+20
Defense nuclear waste disposal (90M in 270 Energy)			26,000	+26,000	
Total, Environmental & other defense activities		6,884,292	6,567,840	-316,452	-4
Total, Atomic Energy Defense Activities	21,497,000	22,112,910	23,052,840	+939,930	+4
	****		, ,		
Power marketing administrations:					
Southeastern power administration				0	
Southwestern power administration	11,400	10,400	10,400	0	
Western area power administration (CROM)	93,372	89,372	89,196	-176	-0
Falcon & Amistad operating & maintenance fund	228	228	228	0	
Colorado River Basins		-23,000	-21,400	+1,600	+7
Total, Power marketing administrations	82,000	77,000	78,424	+1,424	+1
Federal energy regulatory commission				0	
ubtotal, Energy And Water Development and Related	0.4 = 6 = 5 =		0.4.05= ==:		
gencies	34,526,657	35,657,317	31,890,529	-3,766,788	-10
cess Fees and Recoveries, FERC	-9,000	-16,000	-16,000	0	
tle XVII Loan guar. prog section 1703					
egative Credit Subsidy Receipt		-107,000	-15,000	+92,000	+86
ale of Northeast Gasoline Supply Reserve (NGSR)			-75,000	-75,000	
ale of Northeast Home Heating Oil Reserve			-82,000	-82,000	

<sup>&</sup>lt;sup>1</sup> The FY 2020 budget request for \$27M in NGSR does not include a request for direct appropriations; instead the Department is requesting authorization to deposit up to \$27 million in proceeds from the sale of one-million barrels of refined petroleum product (gasoline blendstock) from the Strategic Petroleum Reserve.

	FY 2018 FY 2019 Total Enacted Enacted		FY 2020 Congressional	FY 2020 F FY 2019	- 1
	Approp.	Approp.	Request	\$	%
Memo: Total Discretionary by budget function					
(Defense (050) function, non-add)	(21,630,000)	(22,259,000)	(23,190,648)		
(Non-Defense (250/270) function, non-add)	(12,887,657)	(13,275,317)	(8,511,881)		
(Science (250) function, non-add)	(6,259,903)	(6,585,000)	(5,545,972)		
(Energy (270) function, non-add)	(6,627,754)	(6,690,317)	(2,965,909)		

	FY 2018	FY 2018 FY 2019	FY 2018 FY 2019 FY 2	FY 2018   FY 2019   FY 2020   FY 2		FY 2020 Red	FY 2020 Request vs	
	Total Enacted	Enacted	Congressional	FY 2019 E	nacted			
	Approp.	Approp. Approp.	Request	\$	%			
Energy Efficiency and Renewable Energy								
Energy Efficiency and Renewable Energy RDD&D								
Sustainable transportation:	007 500	0.4.000	=0.400	070.000				
Vehicle technologies		344,000	73,400	-270,600	-78.7%			
Bioenergy technologies		226,000	40,000	-186,000	-82.3%			
Hydrogen and fuel cell technologies		120,000	44,000	-76,000	-63.3%			
Total, Sustainable transportation	674,045	690,000	157,400	-532,600	-77.2%			
Renewable power:								
Solar energy technologies	241,600	246,500	67,000	-179,500	-72.8%			
Wind energy technologies	92,000	92,000	23,700	-68,300	-74.29			
Water power technologies		105,000	45,000	-60,000	-57.19			
Geothermal technologies	80,906	84,000	28,000	-56,000	-66.79			
Total, Renewable power	519,506	527,500	163,700	-363,800	-69.09			
Energy efficiency:								
Advanced Manufacturing		320,000	80,500	-239,500	-74.89			
Federal energy management program		30,000	8,400	-21,600	-72.0			
Building Technologies		226,000	57,000	-169,000	-74.89			
Weatherization and intergovernmental programs	220,727	220,000	37,000	-105,000	-74.07			
Weatherization								
Weatherization assistance program	248,000	254,000		-254,000	-100.09			
Training and technical assistance	•	3,000		-3,000	-100.09			
•		,			-100.09			
Total, Weatherization	251,000	257,000		-257,000	-100.07			
State energy program grants	55,000	55,000		-55,000	-100.0%			
Total, Weatherization & intergovernmental Programs	306,000	312,000		-312,000	-100.0%			
Total, Energy efficiency		888,000	145,900	-742,100	-83.6%			
Corporate support programs:								
Program direction	162,500	162,500	122,000	-40.500	-24.99			
Strategic programs		14,000		-14,000	-100.09			
		,000		,000	100.07			
Facilities and infrastructure (NREL O&M)								
National renewable energy laboratory (NREL)	00.000	.=	407.000					
Operation and maintenance		97,000	107,000	+10,000	+10.39			
Total, Corporate support programs	269,500	273,500	229,000	-44,500	-16.3%			
Subtotal, Energy Efficiency and Renew. Energy RDD&D	2,321,778	2,379,000	696,000	-1,683,000	-70.7%			
Subtotal, Energy Efficiency and Renewable Energy	2,321,778	2,379,000	696,000	-1,683,000	-70.7%			
Adjustments:								
Use of prior year balances (EE)			-353,000	-353,000	N/A			
Subtotal, Energy Efficiency and Renewable Energy		2,379,000	343,000	-2,036,000	-85.6%			
Total, Energy Efficiency and Renewable Energy		2,379,000	343,000	-2,036,000	-85.6%			
Electricity Delivery and Energy Reliability								
Transmission reliability				0	N/A			
Resilient distribution systems				0	N/A			
Energy storage				0	N/A			
Transformer resilience and advanced components				0	N/A			
Transmission permitting and technical assistance				0	N/A			
Infrastructure security and energy								
restoration	14,900			0	N/A			
Cybersecurity for energy delivery systems	75,829			0	N/A			
Program direction								
Program direction	29,163			0	N/A			
Subtotal, Program direction				0	N/A			
Total, Electricity Delivery and Energy Reliability				0	N/A			
Electricity (Delivery)		00.00-	=	.04 500	. 22			
Transmission Reliability and Resilience		39,000	70,500	+31,500	+80.89			
Resilient distribution systems		40,000	27,900	-12,100	-30.3%			
Energy storage				_				
Research		46,000	43,500	-2,500	-5.4%			
Construction:								
20-OE-100 Grid Storage Launchpad			5,000	+5,000	N/A			
Total, Energy storage		46,000	48,500	+2,500	+5.4%			

	FY 2018	FY 2019	FY 2020	FY 2020 Request vs	
	Total Enacted	Enacted	Congressional	FY 2019 En	
			Request	\$	%
Transformer regilience and advanced components	Approp.	Approp.			
Transformer resilience and advanced components		7,000	9,000	+2,000	+28.6%
Transmission permitting and technical assistance		7,000	7,000	0	N/A
Program direction		17,000	19,600	+2,600	+15.3%
Total, Electricity (Delivery)	····· <u></u>	156,000	182,500	+26,500	+17.0%
Cybersecurity, Energy Security, and Emergency					
Response					
Cybersecurity for Energy Delivery Systems (CEDS)		89,500	75,000	-14,500	-16.2%
Infrastructure Security and Energy					
Restoration		19,000	70,000	+51,000	+268.4%
Program Direction		11,500	11,500	0	N/A
Total, Office of Cybersecurity, Energy Security, and Emergency					
Response		120,000	156,500	+36,500	+30.4%
Nuclear Energy					
Research and Development					
Integrated University Program	5,000	5,000		-5,000	-100.0%
Step R&D		5,000		-5,000	-100.0%
Reactor Concepts RD&D	237,000	323,500	215,150	-108,350	-33.5%
Fuel cycle research and development	260,056	263,915	90,000	-173,915	-65.9%
Nuclear Energy Enabling Technologies	159,000	152,585	98,450	-54,135	-35.5%
International nuclear energy cooperation	3,000	3,000		-3,000	-100.0%
Total, Research and Development	669,056	753,000	403,600	-349,400	-46.4%
Radiological facility management	29,000	29,000	9,000	-20,000	-69.0%
Idaho facilities management					
Idaho operations and infrastructure	288,000	288,000	204,000	-84,000	-29.2%
Construction:					
16-E-200 Sample preparation laboratory	6,000	30,000	5,242	-24,758	-82.5%
Total, Idaho facilities management	294,000	318,000	209,242	-108,758	-34.2%
Idaho sitewide safeguards and security	133,000	146,090	137,808	-8,282	-5.7%
Program Direction	80,000	80,000	64,350	-15,650	-19.6%
Subtotal, Nuclear Energy	1,205,056	1,326,090	824,000	-502,090	-37.9%
Adjustments:	( 05 500)	( 05 500)	, ,	,	( )
Transfer from NR - Advanced Test Reactor HR 3219 (non-add)		( 85,500)	()	()	()
Subtotal, Nuclear Energy		1,326,090	824,000	-502,090	-37.9%
Total, Nuclear Energy		1,326,090	824,000	-502,090	-37.9%
Defense (050) function(non-add)		(146,090)	( 137,808)		
Energy (270) function(non-add)	( 1,072,056)	( 1,180,000)	( 686,192)		
Fossil Energy Research and Development					
Fossil Energy Research and Development					
Coal					
Coal CCS and Power Systems	400.0=4	400.074		400.074	400.004
Carbon Capture		100,671		-100,671	-100.0%
Carbon Storage		98,096		-98,096	-100.0%
Advanced Energy Systems		129,683		-129,683	-100.0%
Cross-cutting research		56,350		-56,350	-100.0%
Total, Coal CCS and Power Systems	369,117	384,800		-384,800	-100.0%
NETL and records and development	F0 000	E4 000		E4 000	400.004
NETL coal research and development		54,000		-54,000	-100.0%
Supercritical Transformational Electric Power	,	22,430		-22,430	-100.0%
Transformational coal pilots		25,000		-25,000	-100.0%
Total, Coal	481,117	486,230		-486,230	-100.0%
Advanced Coal Energy Systems & CCUS					
Advanced Energy Systems			220,300	+220,300	N/A
Crosscutting Research			60,325	+60,325	N/A
Carbon Capture Utilization and Storage			68,800	+68,800	N/A
NETL Coal Research and Development			38,000	+38,000	N/A
T-1-1 Ad 1015 0 -1 0 00110			387,425	+387,425	N/A
Total, Advanced Coal Energy Systems & CCUS					
Natural gas technologies		51,000	10,730	-40,270	-79.0%
		51,000	10,730	-40,270	-79.0%
Natural gas technologies	50,000	51,000 46,000	10,730 19,000	-40,270 -27,000	-79.0% -58.7%
Natural gas technologies	50,000 40,000	,	·	•	
Natural gas technologies	50,000 40,000 60,000	46,000	19,000	-27,000	-58.7%
Natural gas technologies	50,000 40,000 60,000 700	46,000 61,070	19,000 61,045	-27,000 -25	-58.7% -0.0%
Natural gas technologies Unconventional fossil energy technologies from Petroleum - Oil technologies. Program direction. Special recruitment programs.	50,000 40,000 60,000 700 50,000	46,000 61,070 700	19,000 61,045 700	-27,000 -25 0	-58.7% -0.0% N/A

Fossil Engray Potroloum Posonyos	FY 2018	FY 2019 Enacted	nacted Congressional	FY 2020 Request vs	
	Total Enacted			FY 2019 En	
	Approp.	Approp.	Request	\$	%
Fossil Energy Petroleum Reserves Naval Petroleum and Oil Shale Reserve					
Naval petroleum & oil shale reserve	20,200	10,000	14,000	+4.000	+40.0%
Use of prior year balances				0	N/A
Total, Naval Petroleum & Oil Shale Reserve		10,000	14,000	+4,000	+40.0%
Strategic Petroleum Reserve	202.000	200 200	474.000	22.000	45 50/
Strategic petroleum reserve		206,000	174,000	-32,000	-15.5%
Use of sale proceeds		-300,000 300,000	-450,000 450,000	-150,000 +150.000	-50.0% +50.0%
Northeast Gasoline Supply Reserve	,	29,000	450,000	-29,000	-100.0%
Supplemental Hurricane Funding		29,000		-29,000	N/A
Total, Strategic Petroleum Reserve		235,000	174,000	-61,000	-26.0%
SPR Petroleum Account					
SPR Petroleum Account	11,400	10,000		-10,000	-100.0%
Use of prior year balances	,			0	N/A
Use of NGSR refined petroleum product sale proceeds <sup>1</sup>			27,000	+27,000	N/A
Total, SPR Petroleum Account	8,400	10,000	27,000	+17,000	+170.0%
Northeast Home Heating Oil Reserve					
Northeast home heating oil reserve		10,000		-10,000	-100.0%
Use of prior year balances				0	N/A
Total, Northeast Home Heating Oil Reserve		10,000		-10,000	-100.0%
Total, Fossil Energy Petroleum Reserves	280,516	265,000	215,000	-50,000	-18.9%
Uranium Enrichment Decontamination and Decommissioning Fund					
Oak Ridge	404.070	40= 000	400 400	0= =04	40.00/
Oak Ridge		195,000	109,439	-85,561	-43.9%
Total, Oak Ridge	194,673	195,000	109,439	-85,561	-43.9%
Paducah	205,530	206,000	207 215	+1 215	+0.6%
Nuclear facility D&D, Paducah Total, Paducah		206,000	207,215 207,215	+1,215 +1,215	+0.6%
		,	,	,	
Portsmouth Nuclear facility DRD Bottom of the	242.200	200 024	204 550	00.070	47.00/
Nuclear facility D&D, Portsmouth	342,389	366,931	304,559	-62,372	-17.0%
Construction 15-U-408 On-site waste disposal facility					
Portsmouth (PO-0040)	38,882	41,168	41,102	-66	-0.2%
20-U-401 On -site waste disposal facility (Cell Line 2&3)			10,000	+10,000	N/A
Total, Portsmouth.		408,099	355,661	-52,438	-12.8%
Pension and community and regulatory support	22,794	21,030	21,762	+732	+3.5%
Title X uranium/thorium reimbursement program	,	11,000	21.035	+10,035	+91.2%
Total, Uranium Enrichment D&D Fund		841,129	715,112	-126,017	-15.0%
Energy Information Administration					
National energy information system	125,000	125,000	118,000	-7,000	-5.6%
Total, Energy Information Administration	125,000	125,000	118,000	-7,000	-5.6%
Non-Defense Environmental Cleanup Fast flux test reactor facility (WA)	2,240	2,240	2,500	+260	+11.6%
Gaseous diffusion plants		101,304	103,073	+1,769	+11.0%
·		.51,004	.50,070	1,100	. 1.7 70
Small sites: Small sites	119,856	131,456	66,692	-64,764	-49.3%
Subtotal, Small sites		131,456	66,692	-64,764	-49.3% -49.3%
West Valley demonstration project					
West Valley demonstration project West Valley demonstration project	75,000	75,000	75,215	+215	+0.3%
	75,000	75,000 75,000	75,215 75,215 <b>247,480</b>	+215 +215 - <b>62,520</b>	+0.3% +0.3% -20.2%

	FY 2018	EV 2010	EV 2020	EV 2020 Des	
	Total Enacted Approp.	FY 2019 Enacted Approp.	FY 2020 Congressional Request	FY 2020 Req FY 2019 Er	
ience	дриор.	дрргор.	request	Ψ	70
Office of Science					
Advanced Scientific Computing Research					
Advanced Scientific Computing Research	605,000	702,794	732,153	+29,359	+4.20
Construction:	205.000	222 706	100 725	42.071	10.00
17-SC 20 SC Exascale Computing Project (SC-ECP)		232,706 232,706	188,735 188,735	-43,971 -43,971	-18.99 -18.99
Total, Advanced Scientific Computing Research		935,500	920,888	-14,612	-1.6
Total, Tavarious Confidence Company Recognition	010,000	000,000	020,000	14,012	1.0
Basic Energy Sciences	4 744 000	4 757 700	4 075 005	00.445	4.7
Research	1,744,900	1,757,700	1,675,285	-82,415	-4.7
13-SC-10 Linac Coherent Light Source-II (LCLS-II), SLAC	192.100	129,300		-129,300	-100.0
18-SC-10 Advanced Photon Source Upgrade (APS-U), ANL	- ,	130,000	150,000	+20,000	+15.4
18-SC-11 Spallation Neutron Source Proton Power	00,000	100,000	100,000	. 20,000	. 10.1
Upgrade (PPU), ORNL	36,000	60,000	5,000	-55,000	-91.7
18-SC-12 Advanced Light Source					
Upgrade (ALS-U), LBNL	16,000	60,000	13,000	-47,000	-78.3
18-SC-13 Linac Coherent Light Source-II-HE (LCLS-II-HE), SLAC	8,000	28,000	14,000	-14,000	-50.0
19-SC-14 Second Spallation Neutron Source (SNS) Target Station (STS), ORNL		1,000	1,000	0	N.
Total, Construction		408,300	183,000	-225,300	-55.2
Total, Basic Energy Sciences	2,090,000	2,166,000	1,858,285	-307,715	-14.2
Biological and Environmental Research	673,000	705,000	494,434	-210,566	-29.9
Fusion Energy Sciences			001 ==0	40= 0=0	
Research	410,111	432,000	294,750	-137,250	-31.8
Construction:			1 000	11.000	N
20-SC-61 Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC		132.000	1,000 107,000	+1,000 -25,000	N -18.9
14-SC-60 U.S. Contributions to ITER		132,000	108,000	-24,000	-18.2
Total, Fusion Energy Sciences		564,000	402,750	-161.250	-28.6
Total, Fusion Energy Sciences	552,111	304,000	402,730	-101,250	-20.0
High Energy Physics					
Research	767,600	800,000	648,038	-151,962	-19.0
Construction:					
18-SC-42 Proton Improvement Plan II (PIP-II), FNAL	1,000	20,000	20,000	0	N/
11-SC-40 Long Baseline Neutrino Facility/Deep					
Underground Neutrino Experiment (LBNF/DUNE), FNAL	95,000	130,000	100,000	-30,000	-23.1
11-SC-41 Muon to Electron Conversion	44.400	00.000		00.000	400.0
Experiment, FNAL		30,000	120,000	-30,000 -60,000	-100.0
Total, Construction		180,000 980,000	768,038	-211,962	-33.3 -21.6
Total, Flight Energy Friysics	908,000	960,000	700,030	-211,902	-21.0
Nuclear Physics					
Operation and Maintenance	586,800	615,000	579,854	-35,146	-5.7
Construction:					
20-SC-51 U.S. Stable Isotope Production and Research Center, ORNL (U.S SIPRC).			5,000	+5,000	N
14-SC-50 Facility for Rare Isotope Beams (FRIB)					
Michigan State University		75,000	40,000	-35,000	-46.7
Total, Construction	97,200	75,000	45,000	-30,000	-40.0
Total, Nuclear physics	684,000	690,000	624,854	-65,146	-9.4
Workforce Development for Teachers and Scientists	19,500	22,500	19,500	-3,000	-13.3
Worklord Development for Teachers and Odentists	13,300	22,500	13,300	-5,000	-10.0
Science Laboratories Infrastructure					
Infrastructure Support					
Payment in Lieu of Taxes		1,713	4,540	+2,827	+165.0
Oak Ridge Landlord	-,	6,434	5,610	-824	-12.8
Oak Ridge Nuclear Operations	,	26,000	10,000	-16,000	-61.5
Facilities and Infrastructure		45,543	25,050	-20,493	-45.0
Total, Infrastructure Support	104,442	79,690	45,200	-34,490	-43.3
Construction					
20-SC-77 Large Scale Collaboration Center, SLAC			3,000	+3,000	N
20-SC-76 Craft Resources Support Facility, ORNL			20,000	+20,000	N
20-SC-75 CEBAF Renovation and Expansion, TJNAF			2,000	+2,000	N
•					
20-SC-72 Seismic Safety and Infrastructure Upgrades, LBNL			5,000	+5,000	N
20-SC-71 Critical Utilities Rehabilitation Project, BNL			12,000	+12,000	N/
19-SC-71 Science User Support Center (SUSC), BNL		7,000	6,400	-600	-8.6

	FY 2018	018 FY 2019	FY 2020	FY 2020 Request vs	
	Total Enacted	Enacted	Congressional	FY 2019 Er	
	Approp.	Approp.	Request	\$	%
19-SC-72 Electrical Capacity and Distribution Capability, ANL		30,000	30,000	0	N/A
19-SC-73 Translational Research Capability, ORNL		25,000	15,000	-10,000	-40.0%
19-SC-74 BioEPIC, LBNL		5,000	6,000	+1,000	+20.0%
18-SC-71 Energy Sciences Capability at PNNL	20,000	24,000	9,000	-15,000	-62.5%
17-SC-71 Integrated Engineering Research Center, FNAL	20,000	20.000	10,000	10.000	E0 00/
17 SC-73 Core Facility Revitalization,	20,000	20,000	10,000	-10,000	-50.0%
BNL	30,000	42,200		-42,200	-100.0%
LBNL	38,350			0	N/A
15-SC-76 Materials Design Laboratory,	44.500				N1/A
ANL Total, Construction		153,200	118,400	-34,800	-22.7%
Total, Science Laboratories Infrastructure		232,890	163,600	-69,290	-29.8%
Safeguards and Security		106,110 183,000	110,623 183,000	+4,513 0	+4.3% N/A
Total, Science		6,585,000	5,545,972	-1,039,028	-15.8%
Advanced Research Projects Agency - Energy					
Advanced research projects agency - Energy	004.004	004 750		004.750	100.00/
ARPA-E projects  Program direction		334,750 31,250		-334,750 -31,250	-100.0% -100.0%
Rescission of prior year balances.		31,250	-287,000	-287,000	-100.0% N/A
Total, Advanced Research Projects Agency - Energy		366,000	-287,000	-653,000	-178.4%
Office of Indian Energy Policy and Programs		40.000	4 470	0.704	00.40/
Tribal Energy ProgramProgram direction		13,200 4,800	4,479 3,521	-8,721 -1,279	-66.1% -26.6%
Total, Office of Indian Energy Policy and Programs		18,000	8,000	-10,000	-55.6%
Nuclear Waste Disposal					
Yucca mountain and interim storage			90,000	+90,000	N/A
Total, Nuclear Waste Disposal			90,000	+90,000	N/A
Departmental Administration					
Office of the Secretary		5,395	5,119	-276	-5.1%
Congressional & intergovernmental affairs		6,200	5,895	-305	-4.9%
Chief financial officer  Economic impact and diversity		48,912 10,169	52,000 9,494	+3,088 -675	+6.3% -6.6%
Office of Indian energy policy and programs	-,	10,109	9,494	-075 0	-0.0% N/A
Chief information officer	126,274	131,624	124,554	-7,070	-5.4%
Management		55,385	54,358	-1,027	-1.9%
Project Management Oversight and Assessments		15,005	14,255	-750	-5.0%
Chief human capital officer	25,513	26,125	24,316	-1,809	-6.9%
Office of Small and Disadvantaged Business Utilization	3,000	3,170	3,609	+439	+13.8%
General counsel		33,075	33,075	0	N/A
Energy policy and systems analysis	10,432			0	N/A
Office of Policy		10,010	8,000	-2,010	-20.1%
International affairs		22,878		-22,878	-100.0%
Public Affairs		6,594	6,260	-334	-5.1%
Technology Transitions		8,505	9,080	+575 0	+6.8%
Strategic partnership projects (SPP)		40,000 423,047	40,000 390,015	-33,032	-7.8%
Adjustments:	-,	-,	,	-,	
Use of prior year balances (CI)		-2,000		+2,000	+100.0%
Use of prior year balances (OP)		-7,500		+7,500	+100.0%
Defense related administrative support		.,550		.,000	. 30.070
Funding from other defense activities (CFO)	-16,726	-20,065	-54,538	-34,473	-171.8%
Funding from other defense activities (CIO)		-131,624	-124,554	+7,070	+5.4%
Total, Defense related administrative support		-151,689	-179,092	-27,403	-18.1%
Total, Adjustments		-161,189	-179,092	-17,903	-11.1%
Miscellaneous revenues		-96,000	-93,378	+2,622	+2.7%
Total, Departmental Administration (Net)	189,652	165,858	117,545	-48,313	-29.1%

	FY 2018							FY 2020	FY 2020 Request vs	
	Total Enacted	Enacted	Congressional	FY 2019 E						
Office of Improvedor Council	Approp.	Approp.	Request	\$	%					
Office of Inspector General	49,000	E1 220	E4 01E	12 005	LE 60/					
Office of inspector general		51,330 <b>51,330</b>	54,215 <b>54,215</b>	+2,885 <b>+2,885</b>	+5.6% +5.6%					
Total, Office of hispector Ocheralisminisminisminisminisminisminisminismi	43,000	01,000	04,210	. 2,000	10.070					
International Affairs										
International affairs			36,100	+36,100	N/A					
Title 47 Innovative Technology Lean										
Title 17 - Innovative Technology Loan Guarantee Program										
Administrative expenses	33,000	33,000	3,000	-30,000	-90.9%					
Offsetting collections	-2,108	-20,000	-3,000	+17,000	+85.0%					
Subtotal, Title 17 - Innovative Technology		10.000		10.000	100.00/					
Loan Guarantee Program	30,892	13,000		-13,000	-100.0%					
Rescission of prior year balances (Gen. Prov.)			-160,659	-160,659	N/A					
Total, Title 17 - Innovative Technology			,	,						
Loan Guarantee Program	30,892	13,000	-160,659	-173,659	-1,335.8%					
Tribal Energy Loan Guarantee Program	4.000	4.000		4.000	100.00/					
Administrative expenses		1,000	-8,500	-1,000 -8,500	-100.0% N/A					
Total, Tribal Energy Loan Guarantee Program		1,000	-8,500	-9,500	-950.0%					
Advanced Technology Vehicles Manufacturing										
Loan Program Administrative expenses	5,000	5,000		-5,000	-100.0%					
Total, Advanced Technology Vehicles				·						
Manufacturing Loan Program	5,000	5,000		-5,000	-100.0%					
Federal Salaries and Expenses Program direction	407,595	410,000	434,699	+24,699	+6.0%					
Weapons Activities Directed stockpile work Life extension programs and major alterations										
B61 Life extension program		794,049	792,611	-1,438	-0.2%					
W76 Life extension program W76-2 Modification program		48,888 65,000	10,000	-48,888 -55,000	-100.0% -84.6%					
W88 Alteration program		304,285	304,186	-99	-0.0%					
W80-4 Life extension program		654,766	898,551	+243,785	+37.2%					
IW1		53,000		-53,000	-100.0%					
W87-1 Modification Program (formerly IW1)			112,011	+112,011	N/A					
Total, Life extension programs and major alterations	1,744,088	1,919,988	2,117,359	+197,371	+10.3%					
major altorations	1,744,000	1,515,500	2,117,000	. 107,071	1 10.0 /0					
Stockpile systems	50 <b>7</b> 0°	24.545	74.000	. 0 005	.40.404					
B61 Stockpile systems	59,729 51,400	64,547	71,232 89,804	+6,685 +5,504	+10.4% +6.5%					
W76 Stockpile systemsW78 Stockpile systems	51,400 60,100	84,300 81,329	89,80 <del>4</del> 81,299	+5,504	+6.5% -0.0%					
W80 Stockpile systems.	80,087	80,204	85,811	+5,607	+7.0%					
B83 Stockpile systems.		35,082	51,543	+16,461	+46.9%					
W87 Stockpile systems		83,107	98,262	+15,155	+18.2%					
W88 Stockpile systems		170,913	157,815	-13,098	-7.7%					
Total, Stockpile systems		599,482	635,766	+36,284	+6.1%					
Total, Stockpile Systems	301,034	399,402	033,700	130,204	10.170					
Weapons dismantlement and disposition Operations and maintenance	56,000	56,000	47,500	-8,500	-15.2%					
Stockpile services										
Production support	485,400	510,000	543,964	+33,964	+6.7%					
Research and development support		36,150	39,339	+3,189	+8.8%					
R&D certification and safety		201,840	236,235	+34,395	+17.0%					
Management, technology, and production		300,736 1,048,726	305,000 1,124,538	+4,264 +75,812	+1.4% +7.2%					
Total, Otoonpile services	əəo, <i>i</i> ə0	1,040,120	1, 124,000	173,012	₹1.270					
Strategic materials	24.000	07 400	04 446	TC UC1	0 00/					
Uranium sustainment	,	87,182	94,146	+6,964 0	+8.0% N/A					
i iutolium sustamment	210,367			U	IN/A					

	FY 2018	FY 2018 FY 2019	FY 2018 FY 2019	FY 2018 FY 2019 FY 20		FY 2018 FY 2019 FY 2020 FY 20		FY 2020 Rec	FY 2020 Request vs	
	Total Enacted	Enacted	Congressional	FY 2019 Er						
	Approp.	Approp.	Request	\$	%					
Plutonium sustainment:		000 00-	001.001	. 405 222						
Plutonium sustainment.		286,282	691,284	+405,002	+141.5%					
Plutonium pit production project  Total, Plutonium sustainment:		75,000 361,282	21,156 712,440	-53,844 +351,158	-71.8% +97.2%					
Total, Flatorium Sustainment		301,202	7 12,440	. 551, 150	.57.270					
Tritium sustainment	198,152	290,275	269,000	-21,275	-7.3%					
Domestic uranium enrichment	60,000	50,000	140,000	+90,000	+180.0%					
Lithium sustainment		29,135	28,800	-335	-1.1%					
Strategic materials sustainment		216,196	256,808	+40,612	+18.8%					
Total, Strategic materials		1,034,070	1,501,194	+467,124	+45.2%					
Total, Directed stockpile work	4,009,447	4,658,266	5,426,357	+768,091	+16.5%					
Research, development, test, and evaluation (RDT&E)										
Science										
Advanced certification	57,710	57,710	57,710	0	N/A					
Primary assessment technologies		89,313	95,169	+5,856	+6.6%					
Dynamic materials properties	120,000	120,000	133,800	+13,800	+11.5%					
Advanced radiography	37,600	32,544	32,544	0	N/A					
Secondary assessment technologies		77,553	77,553	0	N/A					
Academic alliances and partnerships		53,364	44,625	-8,739	-16.4%					
Enhanced Capabilities for Subcritical Experiments		50,000	145,160	+95,160	+190.3%					
Total, Science	474,524	480,484	586,561	+106,077	+22.1%					
Engineering										
Enhanced surety	39,717	39,717	46,500	+6.783	+17.1%					
Weapon systems engineering assessment		00,	10,000	0,100	,					
technology	23,029	23,029		-23,029	-100.0%					
Delivery environments (formerly Weapon systems engineering	,	,		,						
assessment technology)			35,945	+35,945	N/A					
Nuclear survivability	45,230	48,230	53,932	+5,702	+11.8%					
Enhanced surveillance	,	45,147	57,747	+12,600	+27.9%					
Stockpile Responsiveness		34,000	39,830	+5,830	+17.1%					
Total, Engineering	183,123	190,123	233,954	+43,831	+23.1%					
Inertial confinement fusion ignition and										
high yield Ignition and other stockpile programs		101,140	55,649	-45,491	-45.0%					
Ignition		101,140	33,049	-45,491	N/A					
Support of other stockpile programs.				0	N/A					
Diagnostics, cryogenics and experimental				Ü	107					
support	77,915	77,915	66,128	-11,787	-15.1%					
Pulsed power inertial confinement fusion		6,596	8,571	+1,975	+29.9%					
Joint program in high energy density										
laboratory plasmas	9,492	8,492	12,000	+3,508	+41.3%					
Facility exerctions and target production	246 704	250 701	220 247	10 544	2.60/					
Facility operations and target production.	346,791	350,791	338,247	-12,544	-3.6%					
Total, Inertial confinement fusion and high yield	544,934	544,934	480,595	-64,339	-11.8%					
yielu		344,934	400,595	-04,559	-11.070					
Advanced simulation and computing										
Advanced simulation and computing	721,244	670,119	789,849	+119,730	+17.9%					
Construction:	,	,	,	,						
18-D-670, Exascale Class Computer Cooling Equipment, LANL	22,000	24,000		-24,000	-100.0%					
18-D-620, Exascale Computing Facility										
Modernization Project, LLNL		23,000	50,000	+27,000	+117.4%					
Total, Construction		47,000	50,000	+3,000	+6.4%					
Total, Advanced simulation and computing	746,244	717,119	839,849	+122,730	+17.1%					
Advanced and find the development										
Advanced manufacturing development	12,000	12,000	18,500	+6,500	+54.2%					
Additive manufacturing  Component manufacturing development	,	38,644	48,410	+9,766	+25.3%					
Process technology development		30,914	69,998	+39,084	+126.4%					
Total, Advanced manufacturing development		81,558	136,908	+55,350	+67.9%					
rotal, ravanoca manadataning development		01,000	100,000	100,000	.07.070					
Total, RDT&E	2,034,365	2,014,218	2,277,867	+263,649	+13.1%					
			• •	•						
Infrastructure and operations										
Operating										
Operations of facilities	040 4=0	070 000	005.000	. 25 222	. 4 00/					
Operations of facilities.		870,000	905,000	+35,000	+4.0%					
Safety and environmental operations		110,000	119,000 456,000	+9,000	+8.2%					
Maintenance and repair of facilities	515,138	515,000	456,000	-59,000	-11.5%					

	FY 2018	FY 2019	FY 2020			
	Total Enacted		Congressional	FY 2020 Req	Enacted	
	Approp.	Approp.	Request	\$	%	
Descritelization	Арргор.	Арргор.	Request	φ	/0	
Recapitalization	400.004	450,000	447.057	0.040	0.5	
Infrastructure and safety		450,000	447,657	-2,343	-0.5	
Capability based investments		109,057	135,341	+26,284	+24.1	
Total, Recapitalization		559,057	582,998	+23,941	+4.3	
Total, Infrastructure and Operations	2,086,269	2,054,057	2,062,998	+8,941	+0.4	
Construction:						
19-D-670, 138kV Power Transmission System Replacement, NNSS			6,000	+6,000	N	
					N	
18-D-660, Fire Station, Y-12				0		
18-D-650, Tritium Production Capability, SRS			27,000	+27,000	N	
18-D-680, Materials staging facility, PX		24,000		-24,000	-100.0	
18-D-690, Lithium production capability, Y-12	5,000	19,000		-19,000	-100.0	
18-D-690, Lithium processing facility, Y-12						
(formerly Lithium production capability)			32,000	+32,000	N	
17-D-640, U1a Complex Enhancements Project,						
NNSS	22,100	20,000	35,000	+15,000	+75.0	
17-D-630, Expand Electrical Distribution						
System, LLNL	6,000			0	N	
16-D-515, Albuquerque complex project		47,953		-47,953	-100.0	
15-D-613, Emergency Operations Center, Y-12				0	100.1	
15-D-613, Emergency Operations Center, 1-12			5,000	+5,000	, ,	
15-D-611, Emergency Operations Center, SNL			4,000	+4,000	1	
15-D-301 HE Science & Engineering						
Facility, PX			123,000	+123,000	1	
OT D 000 Dedicable Parks of						
07-D-220, Radioactive liquid waste	2.400			0		
treatment facility upgrade project, LANL	2,100			0	1	
07-D-220-04, Transuranic liquid waste facility,						
LANL	17,895			0	1	
06-D-141, Uranium processing facility						
Y-12. Oak Ridge. TN	663.000	703.000	745.000	+42.000		
Y-12, Oak Ridge, TN  Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research		703,000	745,000	+42,000	+6.0	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	 127,025	703,000 219,842 	745,000 168,444 	-51,398 0	-23.4 N	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation		219,842  	168,444  	-51,398 0 0	-23.4 N N	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239	219,842   219,842	168,444   168,444	-51,398 0 0 -51,398	-23.4 N N -23.4	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation. Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction	127,025 50,214 177,239 1,031,534	219,842  219,842 1,033,795	168,444  168,444 1,145,444	-51,398 0 0 -51,398 +111,649	-23.4 N -23.4 +10.1	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation. Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction	127,025 50,214 177,239 1,031,534	219,842   219,842	168,444   168,444	-51,398 0 0 -51,398	-23.4 N -23.4 +10.1	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation 04-D-125-05, PF -4 equipment installation. Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction Total, Infrastructure and operations	127,025 50,214 177,239 1,031,534	219,842  219,842 1,033,795	168,444  168,444 1,145,444	-51,398 0 0 -51,398 +111,649	-23.4 N N -23.4 +10.8	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL. 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation. Total, Chemistry and metallurgy research replacement (CMRR). Total, Construction Total, Infrastructure and operations.	127,025 50,214 177,239 1,031,534 3,117,803	219,842  219,842 1,033,795 3,087,852	168,444  168,444 1,145,444 3,208,442	-51,398 0 0 -51,398 +111,649 +120,590	-23.4 N -23.4 +10.4 +3.5	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL. 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation. Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction. Total, Infrastructure and operations.  Secure transportation asset Operations and equipment.	127,025 50,214 177,239 1,031,534 3,117,803	219,842  219,842 1,033,795 3,087,852	168,444  168,444 1,145,444 3,208,442 209,502	-51,398 0 0 -51,398 +111,649 +120,590 +32,885	-23. 1 1 -23. +10. +3.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction Fotal, Infrastructure and operations.  Secure transportation asset Operations and equipment Program direction	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600	219,842  219,842 1,033,795 3,087,852	168,444  168,444 1,145,444 3,208,442	-51,398 0 0 -51,398 +111,649 +120,590	-23. 1 -23. +10. +3. +18. +5.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600	219,842  219,842 1,033,795 3,087,852 176,617 102,022	168,444  168,444 1,145,444 3,208,442 209,502 107,660	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638	-23.    -23.  +10.  +3.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL. 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation. Total, Chemistry and metallurgy research replacement (CMRR). Total, Construction. Total, Infrastructure and operations. Secure transportation asset Operations and equipment. Program direction. Total, Secure transportation asset.	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523	-23. -23. +10. +3. +18. +5. +13.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575	-23. -23. +10. +3. +18. +5. +13.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL. 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation. Total, Chemistry and metallurgy research replacement (CMRR). Total, Construction. Total, Infrastructure and operations.  Secure transportation asset Operations and equipment. Program direction. Total, Secure transportation asset.	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523	-23. -23. +10. +3. +18. +5. +13.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575	-23. -23. +10. +3. +18. +5. +13.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575	-2323. +10. +3. +18. +5. +13.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575	-23. +10. +3. +18. +5. +13.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0	-23. +10. +3. +18. +5. +13.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575	-23. +10. +3. +18. +5. +13. +12.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577 186,728	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187	-23. -23. +10. +3. +18. +5. +13. +12. +12. +39.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577 186,728 232,050	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092	-23. +10. +3. +18. +5. +13. +12. +12. +39. -43.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187	-23. 	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577 186,728 232,050	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092	-23.   1   -23.   +10.   +3.   +13.   +12. 	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577 186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092	-23. 1 1 -23. +10. +13. +18. +5. +13. +12. 1 1 +12. +39. -43. +11.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577 186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092 +1,295,523	-23./ 1-23./ +10./ +3./ +18./ +5./ +12./ 1-2./ 1-39./ -43./ +10./ +10./	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction Total, Infrastructure and operations.  Secure transportation asset Operations and equipment Program direction Total, Secure transportation asset Defense nuclear security Operations and maintenance Security improvements program Construction: 17-D-710, West end protected area reduction project, Y-12 Total, Defense nuclear security Information technology and cybersecurity Legacy contractor pensions bitotal, Weapons activities  Adjustments Use of prior year balances.	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092 +1,295,523 +13,080	-23.   1	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080 -13,080	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 -87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080	-23. +10. +3. +18. +5. +13. +12. +12. +10. +100. +100.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080 -13,080	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 -87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080	-23. +10. +3. +18. +5. +13. +12. +12. +3943. +11. +100. +100.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080 -13,080	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 -87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080	-23. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080 -13,080	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 -87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080	-23. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080 -13,080	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080 +1,308,603	-23. 1 10. -23. +10. +3. +18. +5. +13. +12. 1 12. +39. -43. +11. +100. +100.	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577 186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080 -13,080 11,100,000	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 -87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080	-23./ 1-23./ +10./ +3./ +18./ +5./ +13./ 1-12./ 1-12./ 1-12./ 1-13./ 1-14./	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803 185,568 105,600 291,168 686,977 30,000 53,600 770,577 186,728 232,050 10,642,138	219,842  219,842 1,033,795 3,087,852 176,617 102,022 278,639 690,638  690,638 221,175 162,292 11,113,080 -13,080 11,100,000	168,444 168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213 778,213 309,362 91,200 12,408,603 114,000 32,925	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080 +13,080 +1,308,603	-23.4 +10.0 +3.9 +13.8 +12.7 N +12.7 N +12.7 +10.0 +11.8	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction Total, Infrastructure and operations.  Secure transportation asset Operations and equipment Program direction Total, Secure transportation asset  Defense nuclear security Operations and maintenance Security improvements program Construction: 17-D-710, West end protected area reduction project, Y-12 Total, Defense nuclear security Information technology and cybersecurity Legacy contractor pensions Legacy contractor pensions Information technology and cybersecurity Legacy contractor pensions Legacy contractor pensions Information technology and cybersecurity Legacy contractor pensions Legacy contractor pensions Legacy contractor pensions Legacy contract	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138  10,642,138	219,842 	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080 +13,080 +13,080 +14,000 0 -39,261	-23.4 N N 1-23.4 +10.0 +13.9 +12.1 N N 1-10.0 +11.1 N N N N N N N N N N N N N	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138  10,642,138  10,642,138	219,842 	168,444 	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080 +13,080 +13,080 -39,261 -35,000	-23.4 N -23.4 +10.0 +3.5 +13.6 +12.7 N -17.4 -100.0 -17.4 -100.0	
Chemistry and metallurgy research replacement (CMRR) 04-D-125, Chemistry and metallurgy research replacement project, LANL 04-D-125-04, RLUOB equipment installation. 04-D-125-05, PF -4 equipment installation Total, Chemistry and metallurgy research replacement (CMRR) Total, Construction Total, Infrastructure and operations.  Secure transportation asset Operations and equipment Program direction Total, Secure transportation asset  Defense nuclear security Operations and maintenance Security improvements program Construction: 17-D-710, West end protected area reduction project, Y-12 Total, Defense nuclear security Information technology and cybersecurity Legacy contractor pensions Legacy contractor pensions Information technology and cybersecurity Legacy contractor pensions Legacy contractor pensions Information technology and cybersecurity Legacy contractor pensions Legacy contractor pensions Legacy contractor pensions Legacy contract	127,025 50,214 177,239 1,031,534 3,117,803  185,568 105,600 291,168  686,977 30,000  53,600 770,577  186,728 232,050 10,642,138  10,642,138  10,642,138	219,842 	168,444  168,444 1,145,444 3,208,442 209,502 107,660 317,162 778,213  778,213 309,362 91,200 12,408,603  12,408,603	-51,398 0 0 -51,398 +111,649 +120,590 +32,885 +5,638 +38,523 +87,575 0 0 +87,575 +88,187 -71,092 +1,295,523 +13,080 +13,080 +13,080 +13,080 +14,000 0 -39,261	-23.   1	

	FY 2018							FY 2020	FY 2020 Req	uest vs
	Total Enacted	Enacted	Congressional	FY 2019 Er						
	Approp.	Approp.	Approp.	Request	\$	%				
Global material security										
International nuclear security	46,339	46,339	48,839	+2,500	+5.4%					
Domestic radiological security	110,433	127,433	90,513	-36,920	-29.0%					
International radiological security		78,907	60,827	-18,080	-22.9%					
Nuclear smuggling detection and deterrence		154,429	142,171	-12,258	-7.9%					
Total, Global material security	390,108	407,108	342,350	-64,758	-15.9%					
Nonproliferation and arms control	134,703	129,703	137,267	+7,564	+5.8%					
Defense nuclear nonproliferation R&D										
Proliferation detection	278,255	281,521	304,040	+22,519	+8.0%					
Nuclear detonation detection	195,749	195,749	191,317	-4,432	-2.3%					
Nonproliferation fuels development	82,500	98,300		-98,300	-100.0%					
Total, Defense Nuclear Nonproliferation R&D	556,504	575,570	495,357	-80,213	-13.9%					
Nonproliferation construction										
U. S. Construction:										
18-D-150 Surplus Plutonium Disposition										
Project			79,000	+79,000	N/A					
99-D-143, Mixed Oxide (MOX) Fuel Fabrication										
Facility, SRS	335,000	220,000	220,000	0	N/A					
Total, U. S. Construction:		220,000	299,000	+79,000	+35.9%					
Total, Nonproliferation construction		220.000	299,000	+79,000	+35.9%					
Total, Defense Nuclear Nonproliferation Programs		1.626.175	1.607.507	-18,668	-1.1%					
Potal, Delense Nuclear Nonpromeration Programs	1,724,505	1,020,173	1,007,007	- 10,000	-1.170					
Legacy contractor pensions	40,950	28,640	13,700	-14,940	-52.2%					
Nuclear counterterrorism and incident response program										
Nuclear counterterrorism and incident response	282,360	319,185		-319.185	-100.0%					
Emergency Operations	202,000		35,545	+35,545	N/A					
Counterterrorism and Counterproliferation.			336,550	+336,550	N/A					
Total, Nuclear counterterrorism and incident response			330,330	1330,330	IN/A					
·	200 200	240 405	272.005	. 50.040	140.00/					
program	282,360	319,185	372,095	+52,910	+16.6%					
Subtotal, Defense Nuclear Nonproliferation	2,048,219	1,974,000	1,993,302	+19,302	+1.0%					
Adjustments										
Use of prior year balances		-25,000		+25,000	+100.0%					
Total, Adjustments		-25,000		+25,000	+100.0%					
Subtotal, Defense Nuclear Nonproliferation	2,048,219	1,949,000	1,993,302	+44,302	+2.3%					
Rescission										
Rescission of prior year balances	-49,000			0	N/A					
Rescission of prior year balances (Gen. Prov.)		-19,000		+19,000	+100.0%					
Total, Defense Nuclear Nonproliferation	1,999,219	1,930,000	1,993,302	+63,302	+3.3%					
Naval Reactors										
Naval reactors development	473,065	514,951	531,205	+16,254	+3.2%					
Columbia-Class reactor systems development	156,700	138,000	75,500	-62,500	-45.3%					
S8G Prototype refueling	250,000	250,000	155,000	-95,000	-38.0%					
Naval reactors operations and infrastructure	466,884	525,764	553,591	+27,827	+5.3%					
Program direction	47,651	48,709	50,500	+1,791	+3.7%					
Construction:			00.700	.00 700	<b>N</b> 1/A					
20-D-931, KL Fuel development laboratory			23,700	+23,700	N/A					
19-D-930, KS Overhead Piping		10,994	20,900	+9,906	+90.1%					
17-D-911, BL Fire System Upgrade		13,200		-13,200	-100.0%					
15-D-904, NRF Overpack Storage Expansion 3	13,700			0	N/A					
15-D-903, KL Fire System Upgrade	15,000			0	N/A					
14-D-901, Spent fuel handling recapitalization										
project, NRF		287,000	238,000	-49,000	-17.1%					
Total, Construction	225,700	311,194	282,600	-28,594	-9.2%					
Transfer to NE - Advanced Test Reactor (non-add)	(-85,500)	(-85,500)	()	()	()					
Total, Naval Reactors	1,620,000	1,788,618	1,648,396	-140,222	-7.8%					
Defense Environmental Cleanup										
Closure sites:	4.000	4.000	4.007	. 00	.0.001					
Closure sites administration		4,889	4,987	+98	+2.0%					
	4,889	1,000	.,00.	. 00						
Richland:	4,009	1,000	1,001	.00						
	,	193,692	139,750	-53,942	-27.8%					

	FY 2018 Total Enacted	FY 2019 Enacted	FY 2020 Congressional	FY 2020 Re FY 2019 E	
	Approp.	Approp.	Request	\$	%
Central plateau remediation:	000.070	222.252	470.040	107 100	00.40/
Central plateau remediation		660,358 660,358	472,949 472,949	-187,409 -187,409	-28.4% -28.4%
Richland community and regulatory support	,	10,121	5,121	-5,000	-49.4%
Construction:					
18-D-404 WESF Modifications and Capsule Storage	6,500	1,000	11,000	+10,000	+1,000.0%
Total, Construction	6,500	1,000	11,000	+10,000	+1,000.0%
Total, Richland	863,192	865,171	628,820	-236,351	-27.3%
Office of River Protection:					
Waste Treatment Immobilization Plant Commissioning Rad liquid tank waste stabilization	8,000	15,000	15,000	0	N/A
and disposition	719,000	771,947	677,460	-94,487	-12.2%
Construction: 18-D-16 Waste treatment and immobilization plant -					
LBL/Direct feed LAW	630,000	655,000	640,000	-15,000	-2.3%
15-D-409 Low activity waste pretreatment					
system, ORP		56,053		-56,053	-100.0%
01-D-16 D, High-level waste facility		60,000	30,000	-30,000	-50.0%
01-D-16 E, Pretreatment Facility		15,000	20,000	+5,000	+33.3%
Total, Construction	833,000	786,053	690,000	-96,053	-12.2%
ORP Low-level waste offsite disposal		1 573 000	10,000	+10,000	N/A
Total, Office of River protection		1,573,000	1,392,460	-180,540	-11.5%
Idaho National Laboratory:	400,000	400.000	004.054	00.040	04.40/
Idaho cleanup and waste disposition		420,000	331,354	-88,646	-21.1%
ID Excess facilities R&D		10,000 3,200	3,500	-10,000 +300	-100.0% +9.4%
Total, Idaho National Laboratory		433,200	334,854	-98,346	-22.7%
		.00,200	33 1,03 1	00,010	
NNSA sites and Nevada off-sites  Lawrence Livermore National Laboratory		1,704	1,727	+23	+1.3%
LLNL Excess facilities R&D		25,000	128,000	+103,000	+412.0%
Nuclear facility D & D	100,000	25,000	120,000	. 100,000	1412.070
Separations Process Research Unit	4,800	15,000	15,300	+300	+2.0%
Nevada	60,136	60,136	60,737	+601	+1.0%
Sandia National Laboratories	2,600	2,600	2,652	+52	+2.0%
Los Alamos National Laboratory		220,000	195,462	-24,538	-11.2%
Total, NNSA sites and Nevada off-sites		324,440	403,878	+79,438	+24.5%
Oak Ridge Reservation:					
OR Nuclear facility D & D		189,000	93,693	-95,307	-50.4%
OR Excess facilities R&D	,	52 200	45,000	-7,300	N/A -14.0%
U233 Disposition Program  OR cleanup and waste disposition	50,511	52,300	45,000	-7,300	-14.076
OR cleanup and waste disposition	71,000	74,000	82.000	+8,000	+10.8%
Subtotal, OR cleanup and waste disposition		74,000	82,000	+8,000	+10.8%
Construction:					
17-D-401 On-site waste disposal facility	10,000	10,000	15,269	+5,269	+52.7%
14-D-403 Outfall 200 Mercury Treatment	17 100	76 000	40,000	27.000	3E E0/
Facility Total, Construction		76,000 86.000	49,000 64,269	-27,000 -21,731	-35.5% -25.3%
Total, OR cleanup and waste disposition		160,000	146,269	-13,731	-8.6%
OR community & regulatory support	5,605	5,700	4,819	-881	-15.5%
OR technology development and deployment	,	3,000	3,000	0	N/A
Total, Oak Ridge Reservation		410,000	292,781	-117,219	-28.6%
Savannah River Sites:					
Savannah River risk management operations:					
Savannah River risk management operations	482,960	489,460	490,613	+1,153	+0.2%
Construction: 18-D-402, Emergency Operations Center Replacement, SR	500	1,259	6,792	+5,533	+439.5%
Total, Savannah River risk management operations		490,719	497,405	+6,686	+1.4%
• •		,	4.740	,	E7 001
SR community and regulatory supportRadioactive liquid tank waste:	11,249	11,249	4,749	-6,500	-57.8%
Radioactive liquid tank waste.  Radioactive liquid tank waste stabilization					
and disposition	637,105	696,869	797,706	+100,837	+14.5%
Construction: 20-D-402 Advanced Manufacturing Collaborative Facility (AMC)			50,000	+50,000	N/A
20-D-401 Saltstone Disposal Unit #10, 11, 12			500	+500	N/A

Congressional Request	FY 2019 E \$ -10,000 +44,173 -1,209 -109,012 -25,548 +75,289 +75,475  -12,607  -26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537  -15,562 +4,600 -517,499  +5,789 +3,881 +9,670	nacted % -100.0% +583.0% -2.9% -33.9% -13.5% +5.4% -4.0% -31.1% +3,350.0% -1.3% -6.6% N/A +4.3% -100.0% +100.0% -8.4%
0 7 51,750 3 40,034 0 20,988 0 163,272 9 960,978 7 1,463,132 5 299,088 2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 0 5,506,501	-10,000 +44,173 -1,209 -109,012 -25,548 +75,289 +75,475 -12,607 -26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499	-100.0% +583.0% -2.9% -83.9% -13.5% +8.5% +5.4% -4.0% -31.1% +3,350.0% -1.3% -6.6% N/A +4.3% -100.0% -8.4%
7 51,750 3 40,034 40,034 0 20,988 0 163,272 9 960,978 7 1,463,132 5 299,088 2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 15,562 0 0 5,506,501	+44,173 -1,209 -109,012 -25,548 +75,289 +75,475  -12,607  -26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537  -15,562 +4,600 -517,499 +5,789 +3,881	+583.0% -2.9% -83.9% -13.5% -13.5% +5.4% -4.0% -31.1% +3,350.0% +8.6% N/A +4.3% -100.0% -8.4%
3	-1,209 -109,012 -25,548 +75,289 +75,475 -12,607 -26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	-2.9% -83.9% -13.5% +8.5% +5.4%  -4.0%  -31.1% +3,350.0% +8.6% N/A +4.3% -100.0% -8.4%
0 20,988 0 163,272 9 960,978 7 1,463,132 5 299,088 2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 5,522,063 	-109,012 -25,548 +75,289 +75,475 -12,607 -26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	-83.9% -13.5% +8.5% +5.4% -4.0% -31.1% +3,350.0% -8.6.6% N/A +4.3% -100.0% -8.4%
0 163,272 9 960,978 7 1,463,132 5 299,088 2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 5,522,063 0 5,522,063 0 5,506,501	-25,548 +75,289 +75,475 -12,607 -26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	-13.5% +8.5% +5.4% -4.0% -31.1% +3,350.0% +8.6% -1.3% -6.6% N/A +4.3% -100.0% -8.4% N/A +100.0%
9 960,978 7 1,463,132 5 299,088 2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 0 5,506,501 9 139,628 9 72,881 9 212,509 8 24,068 2 57,211	+75,289 +75,475 -12,607 -26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	+8.5% +5.4% -4.0% -31.1% +3,350.0% +8.6% -1.3% -6.6% N/A +4.3% -100.0% +100.0% -8.4%
7 1,463,132 5 299,088 2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 15,562 0 5,506,501 9 139,628 0 72,881 9 212,509 8 24,068 2 57,211	+75,475  -12,607  -26,158 +33,500 +7,342 -5,265  -19,592 0 +13,188 -25,000 +7,577 -506,537  -15,562 +4,600 -517,499  +5,789 +3,881	+5.4%  -4.0%  -31.1% +3,350.0% +8.6% -1.3%  -6.6% N/A +4.3% -100.0% +100.0% -8.4%
2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	-26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499	-31.1% +3,350.0% +8.6% -1.3% -6.6% N/A +43,3% -100.0% +100.0% -8.4% N/A +100.0%
2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	-26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499	-31.1% +3,350.0% +8.6% -1.3% -6.6% N/A +43,3% -100.0% +100.0% -8.4% N/A +100.0%
2 58,054 0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	-26,158 +33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499	-31.1% +3,350.0% +8.6% -1.3% -6.6% N/A +43,3% -100.0% +100.0% -8.4% N/A +100.0%
0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 5,522,063 	+33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	+3,350.0% +8.6% -1.3% -6.6% N/A +4.3% -100.0% +100.0% -8.4%
0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 5,522,063 	+33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	+3,350.0% +8.6% -1.3% -6.6% N/A +4.3% -100.0% +100.0% -8.4%
0 34,500 2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 5,522,063 	+33,500 +7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	+3,350.0% +8.6% -1.3% -6.6% N/A +4.3% -100.0% +100.0% -8.4%
2 92,554 7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	+7,342 -5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	+8.6% -1.3% -6.6% N/A +4.3% -100.0% +100.0% -8.4%  N/A +100.0%
7 391,642 0 278,908 9 12,979 4 317,622 0 7 0 5,522,063 15,562 0 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	-5,265 -19,592 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	-1.3% -6.6% N/A +4.3% -100.0% +100.0% -8.4%  N/A +100.0%
278,908 9 12,979 4 317,622 0 7 0 5,522,063 15,562 0 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	-19,592 0 0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	-6.6% N/A +4.3% -100.0% +100.0% -8.4% N/A +100.0%
9 12,979 4 317,622 7 0 5,522,063 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	0 +13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	N/A +4.3% -100.0% +100.0% -8.4% N/A +100.0%
4 317,622 0	+13,188 -25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	+4.3% -100.0% +100.0% -8.4% N/A +100.0%
0 7 0 5,522,06315,562 0 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	-25,000 +7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	-100.0% +100.0% -8.4% N/A +100.0%
7 0 5,522,063 15,562 0 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	+7,577 -506,537 -15,562 +4,600 -517,499 +5,789 +3,881	+100.0% -8.4% N/A +100.0%
5,522,063 15,562 0 0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	-506,537 -15,562 +4,600 -517,499 +5,789 +3,881	-8.4% N/A +100.0%
	-15,562 +4,600 -517,499 +5,789 +3,881	N/A +100.0%
0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	+4,600 -517,499 +5,789 +3,881	+100.0%
0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	+4,600 -517,499 +5,789 +3,881	+100.0%
0 5,506,501  9 139,628 0 72,881 9 212,509  8 24,068 2 57,211	+4,600 -517,499 +5,789 +3,881	+100.0%
9 139,628 0 72,881 9 212,509 8 24,068 2 57,211	-517,499 +5,789 +3,881	
0 72,881 9 212,509 8 24,068 2 57,211	+3,881	
0 72,881 9 212,509 8 24,068 2 57,211	+3,881	
0 72,881 9 212,509 8 24,068 2 57,211	+3,881	
0 72,881 9 212,509 8 24,068 2 57,211	+3,881	
9 212,509 8 24,068 2 57,211		+4.3%
8 24,068 2 57,211	+9,670	+5.6%
2 57,211		+4.8%
2 57,211		
	0	N/A
	+4,509	+8.6%
0 81,279	+4,509	+5.9%
8 254,578	-11,800	-4.4%
,	,	
5 283,767	+143,192	+101.9%
2 19,262	+960	+5.2%
7 303,029	+144,152	+90.7%
5 54 538	+34 473	+171.8%
,	,	-5.4%
		+18.1%
	=:,:::	
9 4,852	-887	-15.5%
	,	+20.1%
		+100.0%
2 1,035,339	+1/5,04/	+20.3%
26,000	+26.000	N/A
2 7 5 4 9	19,262 303,029 54,538 124,554 179,092	19,262 +960 303,029 +144,152 54,538 +34,473 124,554 -7,070 179,092 +27,403 4,852 -887 1,035,339 +173,047 +2,000

	EV 2040   EV 2242		EV 2020	EV 2020 D	
	FY 2018	FY 2019 Enacted	FY 2020 Congressional	FY 2020 Request vs FY 2019 Enacted	
	Total Enacted				
Couthweatern Douer Administration	Approp.	Approp.	Request	\$	%
Southwestern Power Administration	40.000	47.000	40.000	2.207	40.00
Operations and maintenance		17,006	13,639	-3,367	-19.89
Purchase power and wheeling		60,000	93,000	+33,000	+55.09
Program direction		32,995	35,157	+2,162	+6.69
Construction		16,875	15,067	-1,808	-10.79
Subtotal, Southwestern Power Administration	112,947	126,876	156,863	+29,987	+23.69
Less alternative financing (for O&M)	9,042	-8,894	-6,018	+2,876	+32.3
Less alternative financing (for PPW)	10,000	-10,000	-10,000	0	N/
Less alternative financing (Const)	9,417	-12,180	-10,070	+2,110	+17.39
Offsetting collections (for program direction)	16,035	-29,695	-31,467	-1,772	-6.0
Offsetting collections (for O&M)		-5,707	-5,908	-201	-3.5
Offsetting collections (for PPW)		-50,000	-83,000	-33,000	-66.0
Use of Prior Year Balances				0	N
Total, Southwestern Power Administration		10,400	10,400	0	N
Western Area Power Administration					
Western Area Power Administration (CROM)					
Construction and rehabilitation	. 52,272	32,632	45,887	+13,255	+40.6
		,	,		
Operation and maintenance		77,056	72,176	-4,880	-6.3
Purchase power and wheeling		486,396	547,650	+61,254	+12.6
Program Direction		238,483	250,091	+11,608	+4.9
Subtotal, Western Area Power Administration (CROM)	. 858,473	834,567	915,804	+81,237	+9.7
Adjustments:					
Less alternative financing (for O & M)		-7,758	-6,600	+1,158	+14.9
Less alternative financing (for Construction)	40,500	-27,077	-39,922	-12,845	-47.4
Less alternative financing (for Program Dir.)	38,398	-39,136	-44,719	-5,583	-14.3
Less alternative financing (for PPW)	289,072	-260,954	-288,769	-27,815	-10.7
Offsetting collections (for program direction)	116,050	-150,761	-149,142	+1,619	+1.1
Offsetting collections (for O&M)	13,854	-25,009	-24,445	+564	+2.3
Offsetting collections (P.L. 108-447/109-103)		-225,442	-258,881	-33,439	-14.8
Offsetting collections (P.L. 98-381)		-9,058	-8,954	+104	+1.1
Use of Prior Year Balances		-3,000	-5,000	-5,000	N/
Subtotal, Adjustments.		-745,195	-826,432	-81,237	-10.9
Subtotal, Western Area Power Administration (CROM)		89,372	89,372	0	-10.9 N/
	. 93,372	09,372	09,372	U	IN/
Rescission:			470	470	NI
Rescission of prior year balances  Total, Western Area Power Administration (CROM)		89,372	-176 89,196	-176 -176	-0.29
Falcon and Amistad Operating and Maintenance Fund Operation and maintenance	. 5,048	4,440	5,647	+1,207	+27.29
·		-1,340	-2,932	-1,592	-118.8
Offsetting collectionsLess alternative financing		-1,340	,	-1,592 -815	-219.1
· · · · · · · · · · · · · · · · · · ·			-1,187		
Use of prior year balances		-2,500	-1,300	+1,200	+48.0
Total, Falcon and Amistad Fund	. 228	228	228	0	N/
Colorado River Basins Power Marketing Fund					
Spending authority from offsetting collections	,				_
Equipment, contracts and other related expense		157,389	153,132	-4,257	-2.7
Program direction	. 58,341	62,948	67,112	+4,164	+6.6
Total, Spending authority from offsetting collections	. 185,396	220,337	220,244	-93	-0.0
	,				
Offsetting collections		-243,337	-241,644	+1,693	+0.7
Total, Colorado River Basins Power Marketing Fund		-23,000	-21,400	+1,600	+7.0
Total, Western Area Power Administration		66,600	68,024	+1,424	+2.1°
otal, Power Marketing Administrations	. 82,000	77,000	78,424	+1,424	+1.89
ederal Energy Regulatory Commission	007.000	200.000	202 222	140 400	
Federal energy regulatory commission.		369,900	382,000	+12,100	+3.3
FERC revenues		-369,900	-382,000	-12,100	-3.3
otal, Federal Energy Regulatory Commission				0	N/
ees and Recoveries, Federal Energy Regulatory					
ces and Recoveries, rederal Energy Regulatory					
ees & Recoveries In Excess of Annual Appropriations	-9,000	-16,000	-16,000	0	N/
itle XVII Loan Guar. Prog Section 1703					
legative Credit Subsidy Receipt		-107,000	-15,000	+92,000	+86.09
ale of Northeast Gasoline Supply Reserve (NGSR)			-75,000	-75,000	N/
ale of Northeast Home Heating Oil Reserve			-82,000	-82,000	N/
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