

Amounts of Energy Used in 1990 and Sources of Energy, by Month
(Millions of kilowatt-hours)

Month	Energy Used and Sources of Energy												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
	336.88	316.93	265.22	285.22	378.76	378.76	378.76	378.76	378.76	378.76	378.76	378.76	378.76
Energy Used by Pumping and Power Plants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A. D. Edmonston Pumping Station	1.24	2.39	4.24	2.99	0.68	1.28	0.01	0.01	0.01	0.01	0.01	0.01	1.46
Alamo Power Plant (Station service)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Badger Hill Pumping Plant	0.22	0.42	0.59	0.42	0.68	0.58	0.87	0.87	0.87	0.87	0.87	0.87	0.46
Baker Slough Pumping Plant	39.56	37.16	36.10	37.16	36.10	47.40	47.40	47.40	47.40	47.40	47.40	47.40	23.34
Buena Vista Pumping Plant	95.13	90.04	76.02	90.04	76.02	108.55	108.55	108.55	108.55	108.55	108.55	108.55	57.98
Chinaman Pumping Plant	0.49	0.67	1.25	0.67	1.25	1.41	1.41	1.41	1.41	1.41	1.41	1.41	0.85
Del Valle Pumping Plant	0.27	0.07	0.06	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Cordoba Pumping Plant	28.82	27.82	40.82	27.82	40.82	28.59	28.59	28.59	28.59	28.59	28.59	28.59	16.73
Devil Canyon Power plant (Station service)	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Devil Canyon Pumping Plant (SWP share)	46.59	38.11	0.15	46.59	0.15	0.37	0.37	0.37	0.37	0.37	0.37	0.37	7.37
Granite Pumping-Generating Plant (SWP share)	104.73	92.21	6.27	104.73	6.27	55.82	55.82	55.82	55.82	55.82	55.82	55.82	41.47
Harvey O. Banks Delta Pumping Plant	84.54	80.03	59.80	84.54	59.80	1.11	1.11	1.11	1.11	1.11	1.11	1.11	0.11
Hayat-Thermaito (Pumpback and station service)	0.41	0.30	1.55	0.41	1.55	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.56
Las Pintas Pumping Plant	43.94	61.80	49.89	43.94	49.89	50.87	50.87	50.87	50.87	50.87	50.87	50.87	33.55
Peabottom Pumping Plant	21.82	16.72	10.00	21.82	10.00	22.49	22.49	22.49	22.49	22.49	22.49	22.49	9.94
Oso Pumping Plant	13.43	15.31	14.57	13.43	14.57	15.43	15.43	15.43	15.43	15.43	15.43	15.43	12.86
South Bay Pumping Plant	41.42	38.96	34.73	41.42	34.73	46.16	46.16	46.16	46.16	46.16	46.16	46.16	25.55
Whoopee Pumping Plant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Watsam E. Warne Pumping Plant (Station service)	827.50	729.88	695.98	827.50	695.98	774.36	774.36	774.36	774.36	774.36	774.36	774.36	432.71
Scheduled High Voltage Transmission Line Losses	10.12	23.94	11.11	10.12	11.11	23.49	23.49	23.49	23.49	23.49	23.49	23.49	15.83
Subtotal	653.33	637.82	578.25	637.82	578.25	637.82	637.82	637.82	637.82	637.82	637.82	637.82	448.54
Total Energy Required	653.33	637.82	578.25	637.82	578.25	637.82	637.82	637.82	637.82	637.82	637.82	637.82	448.54
SWP Energy Sources	2.58	2.91	1.84	2.58	1.84	2.70	2.70	2.70	2.70	2.70	2.70	2.70	1.92
Alamo Powerplant	6.35	7.95	6.73	6.35	6.73	8.21	8.21	8.21	8.21	8.21	8.21	8.21	10.19
Borke Rock Powerplant	54.88	65.89	79.71	54.88	79.71	87.95	87.95	87.95	87.95	87.95	87.95	87.95	60.94
Devil Canyon Powerplant	0.11	1.64	0.35	0.11	0.35	19.77	19.77	19.77	19.77	19.77	19.77	19.77	2.81
Granite Pumping-Generating Plant (SWP share)	64.18	200.02	134.45	64.18	134.45	174.74	174.74	174.74	174.74	174.74	174.74	174.74	123.94
Hayat-Thermaito Powerplant	131.18	(1.74)	90.14	131.18	90.14	149.04	149.04	149.04	149.04	149.04	149.04	149.04	170.84
Radi Garden Unit No. 4	48.22	33.06	22.28	48.22	22.28	46.78	46.78	46.78	46.78	46.78	46.78	46.78	19.86
Watsam E. Warne Powerplant	0.00	0.00	0.00	0.00	0.00	7.39	7.39	7.39	7.39	7.39	7.39	7.39	0.00
Energy Sources from Short-Term Agreements	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bonville Power Administration, Power Exchange	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern California Power Agency, Power Exchange	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Bernardino Valley Municipal Water District - Southern	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California Edison (SCE) Exchange	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Sources from Long-Term Agreements	73.14	64.61	32.09	73.14	32.09	81.51	81.51	81.51	81.51	81.51	81.51	81.51	32.45
Castro Power Plant	12.57	15.93	20.97	12.57	20.97	18.77	18.77	18.77	18.77	18.77	18.77	18.77	20.54
Metropolitan Water District of Southern California Hydroelectric Plants	0.23	2.88	48.58	0.23	48.58	10.17	10.17	10.17	10.17	10.17	10.17	10.17	(0.29)
Power Exchange Delivered to SCE	(132.29)	(237.54)	(203.43)	(132.29)	(203.43)	(218.28)	(218.28)	(218.28)	(218.28)	(218.28)	(218.28)	(218.28)	(158.14)
Power Exchange Received from SCE	448.00	299.02	253.79	448.00	253.79	313.46	313.46	313.46	313.46	313.46	313.46	313.46	400.32
TEFRA Power Corporation	0.06	0.40	0.67	0.06	0.67	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.00
Power System Deviations Account Transactions	0.49	(2.28)	1.84	0.49	1.84	0.88	0.88	0.88	0.88	0.88	0.88	0.88	(2.00)
Purchases	3.39	5.05	0.00	3.39	0.00	6.23	6.23	6.23	6.23	6.23	6.23	6.23	1.28
Arizona Public Service Company	22.37	135.49	124.28	22.37	124.28	0.51	0.51	0.51	0.51	0.51	0.51	0.51	31.89
Bonville Power Administration	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
British Columbia Power Export Corporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EI Paso Electric Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eugene Water and Electric Board	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kalbar Power Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles Department of Water and Power	65.25	0.83	0.00	65.25	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.50
Montana Power Company	0.21	0.83	0.00	0.21	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern California Power Agency	3.27	0.00	0.00	3.27	0.00	23.56	23.56	23.56	23.56	23.56	23.56	23.56	0.00
Pacific Gas and Electric Company	0.00	0.00	0.00	0.00	0.00	3.68	3.68	3.68	3.68	3.68	3.68	3.68	28.00
Pacific Power and Light Company	0.00	24.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland General Electric Company	0.00	9.30	21.62	0.00	21.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pugent Sound Power and Light Company	0.50	1.80	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt River Agricultural Improvement and Power District	11.93	80.56	18.85	11.93	18.85	26.41	26.41	26.41	26.41	26.41	26.41	26.41	12.02
Santa Clara Light	0.00	21.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Clara Light	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Water Power Company	36.06	0.48	66.33	36.06	66.33	56.42	56.42	56.42	56.42	56.42	56.42	56.42	815.77
Western Area Power Administration, Lower Colorado	0.00	0.00	0.00	0.00	0.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	2.87
Subtotal	(33.98)	802.59	(48.77)	(33.98)	802.59	(48.77)	(48.77)	(48.77)	(48.77)	(48.77)	(48.77)	(48.77)	(367.23)
Total Energy Provided to SWP	653.33	637.82	578.25	637.82	578.25	637.82	637.82	637.82	637.82	637.82	637.82	637.82	448.54

Handwritten signature and notes:
 Total Energy Required
 Total Energy Provided to SWP

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TABLE 18
 Energy Used in 1990 for Pumping at Joint-Use Facilities, by Month
 (Millions of kilowatt-hours)

Name of Facility and Use	Month												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Harvey O. Banks Delta Pumping Plant	104.73	92.21	92.21	92.21	6.27	6.27	6.23	41.83	55.82	18.14	41.47	50.02	623.77
Less Energy Scheduled by U. S. Bureau of Reclamation (USBR) for Central Valley Project (CVP)	0.00	0.00	0.00	0.00	0.00	0.00	(6.51)	(18.14)	(10.47)	(8.55)	(8.55)	(60.84)	(60.84)
Energy Used for SWP Pumping	104.73	92.21	92.21	92.21	6.27	6.27	62.33	41.83	55.82	23.69	41.47	50.02	684.61
Doe Arroyos Pumping Plant	49.67	38.41	45.61	38.41	63.36	28.62	52.63	27.54	28.67	17.22	18.71	512.20	512.20
Energy Metered	49.67	38.41	45.61	38.41	63.36	28.62	52.63	27.54	28.67	17.22	18.71	512.20	512.20
Less Energy Scheduled by USBR for CVP Pumping	(22.85)	(10.49)	(15.39)	(10.49)	(22.53)	(26.42)	(12.41)	(0.95)	(0.99)	(1.80)	(1.98)	(138.69)	(138.69)
Less Energy Scheduled by USBR for Station Service	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Used for SWP Pumping	26.82	27.92	30.22	27.92	40.83	2.60	40.22	26.59	27.78	19.22	16.73	373.51	373.51
Glenn III Pumping-Generating Plant (Generating)	5.18	1.64	1.64	1.64	109.92	30.88	36.54	20.71	1.22	2.22	2.81	28.54	28.54
Energy Metered	5.18	1.64	1.64	1.64	109.92	30.88	36.54	20.71	1.22	2.22	2.81	28.54	28.54
Less Energy Scheduled by USBR for CVP Pumping	(5.28)	0.00	0.00	0.00	(43.57)	(16.77)	(16.77)	(3.36)	0.00	0.00	0.00	(16.20)	(16.20)
SWP Share of Energy Generated	(0.10)	1.64	1.64	1.64	66.35	14.11	19.77	17.35	1.22	1.22	2.81	27.73	27.73
Glenn III Pumping-Generating Plant (Pumping)	46.83	68.14	68.14	68.14	3.69	6.18	6.18	3.91	22.39	21.67	36.05	67.24	67.24
Energy Metered	46.83	68.14	68.14	68.14	3.69	6.18	6.18	3.91	22.39	21.67	36.05	67.24	67.24
Less Energy Scheduled by USBR for CVP Pumping	0.00	(29.79)	(29.79)	(29.79)	(3.41)	(5.47)	(5.47)	(3.18)	(21.67)	(21.67)	(28.24)	(17.49)	(17.49)
Less Energy Scheduled by USBR for Station Service	(0.24)	38.11	38.11	38.11	0.14	0.42	0.42	0.37	0.00	0.00	0.00	0.00	0.00
Energy Used for SWP Pumping	46.59	76.46	76.46	76.46	3.69	6.18	6.18	3.91	22.39	21.67	36.05	67.24	67.24
Las Pailas Pumping Plant	0.48	0.90	0.90	0.90	1.55	1.11	1.11	0.49	0.47	0.49	0.56	0.56	0.56
Energy Metered	0.48	0.90	0.90	0.90	1.55	1.11	1.11	0.49	0.47	0.49	0.56	0.56	0.56
Less Energy Scheduled by USBR for CVP Pumping	(0.07)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Used for SWP Pumping	0.41	0.90	0.90	0.90	1.55	1.11	1.11	0.49	0.47	0.49	0.56	0.56	0.56

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TABLE 19

Amounts of Power and Transmission Services Purchased in 1990 and Costs of Purchases

Name of Supplier	Type of Service Purchased	Energy (kWh)	Energy Cost (Dollars)	Transmission Cost (Dollars)	Total Cost (Dollars)
Power and Transmission Purchases					
Arizona Public Service Company	Nonfirm energy	50,945,000	128,335		1,128,335
Bonville Power Administration	Firm and nonfirm energy	575,884,000	10,659,301		10,659,301
British Columbia Power Export Corporation	Firm and nonfirm energy and capacity	508,416,000	12,075,617	1,782,339	13,857,956
Edison Electric Company	Nonfirm energy	865,000	21,035		21,035
Utah Water and Electric Board	Nonfirm energy	1,611,000	42,921		42,921
Idaho Power Company	Nonfirm energy	5,972,000	177,000		177,000
Kings River Conservation District	Hydroelectric energy	80,061,264	615,061		615,061
Los Angeles Department of Water and Power	Nonfirm energy-transmission	1,540,000	33,214	151,403	184,617
Metropolitan Water District of Southern California	Hydroelectric energy	196,125,600	8,080,375		8,080,375
Montana Power Company	Nonfirm energy	88,390,000	2,379,660		2,379,660
Nevada Power Company	Transmission			1,624,644	1,624,644
Northern California Power Agency	Nonfirm energy	2,545,000	65,510		65,510
Pacific Gas and Electric Company	Firm and nonfirm energy and capacity and transmission	86,794,000	6,948,734	6,948,734	13,897,468
Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company	EHV transmission			1,500,000	1,500,000
Pacific Power and Light Company	Nonfirm energy	83,198,000			1,946,839
Portland General Electric Company	Firm and nonfirm energy and transmission	61,082,000	1,158,611		1,158,611
Puget Sound Power and Light Company	Nonfirm energy	35,872,000	21,000		21,000
Salt River Agricultural Improvement and Power District	Nonfirm energy	249,280,000	5,207,719		5,207,719
Seattle City Light	Nonfirm energy	22,514,000			
Southern California Edison Company	Capacity and transmission			2,939,719	2,939,719
TERA Power Corporation	Wind energy	3,587,544			
Washington Water Power Company	Nonfirm energy	424,735,000	1,174,570		1,174,570
Western Area Power Administration, Lower Colorado	Nonfirm energy	27,330,000	68,865		68,865
Subtotal		2,506,747,408	30,408,610	14,946,839	45,355,449
Other Purchases					
Coleman Partnership and Fluid Energy Corporation	Bonnie Rock steam field royalty payments				100,242
Kings River Conservation District	Pine Flat operation and maintenance				25,5885
	Pine Flat out service				5,330,761
Northern California Power Agency	Bonnie Rock steam field drilling operation				1,703,964
Pacific Gas and Electric Company	Bonnie Rock transmission and operations and maintenance				224,523
	Pine Flat transmission facilities ownership				15,071
Subtotal					9,920,406
Total					85,275,755

TABLE 20
Total Amounts of Energy Sold in 1990 and Revenue from Sales

<i>Name of Purchaser</i>	<i>Amount of Energy Sold (Kilowatt-hours)</i>	<i>Revenue from Energy Sales (Dollars)</i>	<i>Revenue from Capacity and Transmission Sales (Dollars)</i>	<i>Total Power Sales (Dollars)</i>
City of Anaheim	1,139,400	960,565	1,139,400	2,099,965
City of Azusa	485,639	485,639	424,800	910,439
City of Banning	152,428	152,428	189,900	342,328
City of Colton	543,701	543,701	480,840	1,024,541
Los Angeles Department of Water and Power	696,100		696,100	696,100
Modesto Irrigation District	6,342,732	6,342,732	877,500	7,220,232
Nevada Power Company	6,027,768	6,027,768	2,599,932	8,627,700
Northern California Power Agency	454,710	454,710	277,949	732,659
Pacific Gas and Electric Company	2,186,485	2,186,485		2,186,485
Portland General Electric	24,000	24,000		24,000
Puget Sound Power and Light Company	425,504	425,504		425,504
City of Riverside	983,537	983,537	759,600	1,743,137
Sacramento Municipal Utility District	1,325,319	1,325,319		1,325,319
Salt River Agricultural Improvement and Power District	163,980	163,980		163,980
San Diego Gas & Electric Company	6,000	6,000		6,000
City of Santa Clara	39,679		39,679	39,679
Southern California Edison (a)	2,861,353	2,861,353	1,058,132	3,919,484
Turlock Irrigation District	4,266,943	4,266,943	1,770,000	6,036,943
City of Vernon	8,143,412	8,143,412	4,800,000	12,943,412
Total	1,438,302,000	\$35,354,056	\$15,113,832	\$50,467,887

a) In addition to amounts listed, total value of 2,560,000 kWh of energy delivered to SCE according to the generation replacement agreement with the Department is \$67,101. The Department delivered that energy to replace generation lost because of water diverted from Santa Ana and Mill Creek by San Bernardino Valley Municipal Water District.