

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office**  
**Forecast of CVP Generation with Uncertainty Bounds Bracketing a Randomly Distributed Population**  
**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**  
**Losses are Estimated per WAPA Contractual Provisions**  
**Uncertainty Bounded Energy Generation (All values in GWh)**

Month	Trinity	JF Carr	Spring Creek	Shasta	Keswick	Folsom	Nimbus	New Melones	Federal San Luis	O'Neill	At Plant Total	Total Losses	Total Energy at Tracy			
													Expected Proj Use	Exp Est Net CVP	Low Est Net CVP	High Est Net CVP
JUN	50	46	41	214	42	62	7	82	48	0	592	10	95	490	370	560
JUL	40	43	38	299	57	62	7	54	33	0	633	11	160	460	400	500
AUG	48	43	38	227	47	46	6	47	15	0	517	9	145	360	260	420
SEP	42	39	38	155	35	32	4	36	0	0	381	7	125	250	170	290
OCT	16	13	20	125	27	32	4	34	0	0	271	5	135	130	80	160
NOV	14	13	10	94	20	30	4	8	0	0	193	3	155	40	0	80
DEC	9	4	6	72	15	31	4	7	0	0	148	3	165	-20	0	10
JAN	6	0	10	71	15	39	5	8	0	0	154	3	140	10	0	50
FEB	6	1	17	123	25	59	7	12	0	0	250	4	140	110	10	170
MAR	18	18	30	158	32	56	7	60	0	0	379	7	65	310	160	400
APR	23	19	8	175	31	73	9	78	24	0	440	8	35	400	220	500
MAY	89	12	13	178	32	80	9	94	47	1	555	9	85	460	300	560
Total	361	251	269	1891	378	602	73	520	167	1	4513	79	1445	3000	1970	3700

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office  
Forecast of CVP Generation**

**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**

**Losses are Estimated per WAPA Contractual Provisions**

**Expected Capacity Based on Estimated Gross Head (All values in MW)**

Month	Trinity	JF Carr	Spring Creek	Shasta	Keswick	Folsom	Nimbus	New Melones	Federal San Luis	O'Neill	At Plant Total	Total Losses	Total Capacity at Tracy			
													Expected CVP	Schd. Out	Expected Proj Use	Expected Net CVP
JUN	128	147	182	710	61	204	10	379	127	1	1949	33	1915	0	145	1770
JUL	126	147	182	709	82	193	10	375	105	0	1930	33	1895	0	235	1660
AUG	124	147	182	670	66	182	8	372	97	0	1847	31	1815	0	225	1590
SEP	121	148	182	514	50	58	3	366	0	0	1442	25	1415	155	175	1240
OCT	120	150	182	377	37	57	6	361	0	0	1291	22	1270	255	150	1120
NOV	119	154	182	502	29	111	6	360	0	0	1463	25	1435	170	170	1265
DEC	119	154	182	510	21	110	3	362	0	0	1462	25	1435	150	150	1285
JAN	60	154	182	398	21	164	4	365	0	0	1349	23	1325	210	110	1215
FEB	61	154	182	559	38	165	5	370	0	0	1535	27	1510	170	135	1375
MAR	62	154	182	568	43	171	5	186	0	0	1371	24	1345	215	90	1255
APR	63	150	182	710	43	183	6	185	174	0	1696	29	1670	175	55	1615
MAY	126	147	182	710	43	199	13	184	144	1	1750	30	1720	10	115	1605

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office**  
**Forecast of CVP Generation**  
**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**  
**Project Use Pumping**

**Expected Project Energy Use at Tracy Load Center (All values in GWh)**

Month	Tracy	Federal Banks	Contra Costa	O'Neill	Federal San Luis	San Felipe	Dos Amigos	Other Uses	Total at Tracy		
									Exp CVP PU	Expected On Peak	Expected Off Peak
JUN	42	0	2	0	0	4	23	25	95	55	40
JUL	64	7	2	2	0	5	30	48	160	90	70
AUG	65	7	2	4	0	5	23	41	145	90	60
SEP	62	7	2	6	17	3	8	19	125	60	65
OCT	63	0	3	9	36	2	3	18	135	55	75
NOV	61	0	3	13	60	2	3	13	155	55	100
DEC	59	0	3	14	74	1	3	9	165	55	110
JAN	49	0	2	11	60	1	5	10	140	45	95
FEB	52	0	2	10	55	1	6	16	140	50	90
MAR	36	0	2	5	5	1	9	8	65	35	30
APR	11	0	2	0	0	2	11	11	35	20	15
MAY	25	0	2	0	0	3	16	37	85	45	35
Total	588	22	28	75	307	30	141	254	1445	655	785

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office**  
**Forecast of CVP Generation**  
**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**  
**Project Use Pumping**

**Expected Project Capacity Use at Tracy Load Center (All values in MW)**

Month	Tracy		Federal Banks		Contra Costa		O'Neill		Federal San Luis		San Felipe		Dos Amigos		Other On/Off
	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	
JUN	66	66	0	0	2	2	0	0	0	0	5	5	36	36	34
JUL	96	96	20	0	2	2	4	4	0	0	7	7	42	42	64
AUG	96	96	20	0	3	3	8	8	0	0	7	7	36	36	55
SEP	96	96	20	0	3	3	12	12	0	59	4	4	12	12	26
OCT	96	96	0	0	4	4	16	16	0	137	3	3	6	6	25
NOV	96	96	0	0	4	4	20	20	22	177	2	2	6	6	18
DEC	81	81	0	0	4	4	20	20	25	198	2	2	6	6	12
JAN	66	66	0	0	3	3	16	16	0	201	1	1	12	12	14
FEB	81	81	0	0	3	3	16	16	0	196	1	1	12	12	23
MAR	51	51	0	0	3	3	8	8	0	24	2	2	18	18	10
APR	18	18	0	0	3	3	0	0	0	0	3	3	18	18	15
MAY	36	36	0	0	3	3	0	0	0	0	4	4	24	24	50

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office**  
**Forecast of CVP Generation**  
**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**  
**Losses are Estimated per WAPA Contractual Provisions**  
**Energy Generation (All values in GWh)**

Month	Trinity	JF Carr	Spring Creek	Shasta	Keswick	Folsom	Nimbus	New Melones	Federal San Luis	O'Neill	Total Losses	Total at Tracy		
												CVP	Proj Use	Net CVP
JUN	50	46	41	214	42	62	7	82	48	0	10	580	95	485
JUL	40	43	38	299	57	62	7	54	33	0	11	620	160	460
AUG	48	43	38	227	47	46	6	47	15	0	9	510	145	365
SEP	42	39	38	155	35	32	4	36	0	0	7	370	125	245
OCT	16	13	20	125	27	32	4	34	0	0	5	270	135	135
NOV	14	13	10	94	20	30	4	8	0	0	3	190	155	35
DEC	9	4	6	72	15	31	4	7	0	0	3	150	165	-15
JAN	6	0	10	71	15	39	5	8	0	0	3	150	140	10
FEB	6	1	17	123	25	59	7	12	0	0	4	240	140	100
MAR	18	18	30	158	32	56	7	60	0	0	7	370	65	305
APR	23	19	8	175	31	73	9	78	24	0	8	430	35	395
MAY	89	12	13	178	32	80	9	94	47	1	9	550	85	465
Total	361	251	269	1890	379	601	74	520	167	1	79	4430	1445	2985

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office**  
**Forecast of CVP Generation**  
**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**  
**Losses are Estimated per WAPA Contractual Provisions**  
**Capacity Based on Estimated Gross Head (All values in MW)**

Month	Trinity	JF Carr	Spring Creek	Shasta	Keswick	Folsom	Nimbus	New Melones	Federal San Luis	O'Neill	Tot. Cap. at Plant	Total Losses	Total Capacity at Tracy			
													CVP	Sch. Out	PU	Net CVP
JUN	128	147	182	710	61	204	10	379	127	1	1949	33	1915	0	145	1770
JUL	126	147	182	709	82	193	10	375	105	0	1930	33	1895	0	235	1660
AUG	124	147	182	670	66	182	8	372	97	0	1847	31	1815	0	225	1590
SEP	121	148	182	514	50	58	3	366	0	0	1442	25	1415	155	175	1240
OCT	120	150	182	377	37	57	6	361	0	0	1291	22	1270	255	150	1120
NOV	119	154	182	502	29	111	6	360	0	0	1463	25	1435	170	170	1265
DEC	119	154	182	510	21	110	3	362	0	0	1462	25	1435	150	150	1285
JAN	60	154	182	398	21	164	4	365	0	0	1349	23	1325	210	110	1215
FEB	61	154	182	559	38	165	5	370	0	0	1535	27	1510	170	135	1375
MAR	62	154	182	568	43	171	5	186	0	0	1371	24	1345	215	90	1255
APR	63	150	182	710	43	183	6	185	174	0	1696	29	1670	175	55	1615
MAY	126	147	182	710	43	199	13	184	144	1	1750	30	1720	10	115	1605

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office**  
**Forecast of CVP Generation**  
**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**  
**Project Use Pumping**  
**Project Energy Use at Tracy Load Center (All values in GWh)**

Month	Tracy	Federal Banks	Contra Costa	O'Neill	Federal San Luis	San Felipe	Dos Amigos	Other Uses	Total at Tracy		
									CVP	On Peak	Off Peak
JUN	42	0	2	0	0	4	23	25	95	55	40
JUL	64	7	2	2	0	5	30	48	160	90	70
AUG	65	7	2	4	0	5	23	41	145	90	60
SEP	62	7	2	6	17	3	8	19	125	60	65
OCT	63	0	3	9	36	2	3	18	135	55	75
NOV	61	0	3	13	60	2	3	13	155	55	100
DEC	59	0	3	14	74	1	3	9	165	55	110
JAN	49	0	2	11	60	1	5	10	140	45	95
FEB	52	0	2	10	55	1	6	16	140	50	90
MAR	36	0	2	5	5	1	9	8	65	35	30
APR	11	0	2	0	0	2	11	11	35	20	15
MAY	25	0	2	0	0	3	16	37	85	45	35
Total	588	22	28	75	307	30	141	254	1445	655	785

**United States Bureau of Reclamation - Mid Pacific Region, Central Valley Operations Office**  
**Forecast of CVP Generation**  
**Based on USBR 50 Pct Forecast -B2, Dated 6/20/2018**  
**Project Use Pumping**  
**Project Capacity Use at Tracy Load Center (All values in MW)**

Month	Tracy		Federal Banks		Contra Costa		O'Neill		Federal San Luis		San Felipe		Dos Amigos		Other On/Off
	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	
JUN	66	66	0	0	2	2	0	0	0	0	5	5	36	36	34
JUL	96	96	20	0	2	2	4	4	0	0	7	7	42	42	64
AUG	96	96	20	0	3	3	8	8	0	0	7	7	36	36	55
SEP	96	96	20	0	3	3	12	12	0	59	4	4	12	12	26
OCT	96	96	0	0	4	4	16	16	0	137	3	3	6	6	25
NOV	96	96	0	0	4	4	20	20	22	177	2	2	6	6	18
DEC	81	81	0	0	4	4	20	20	25	198	2	2	6	6	12
JAN	66	66	0	0	3	3	16	16	0	201	1	1	12	12	14
FEB	81	81	0	0	3	3	16	16	0	196	1	1	12	12	23
MAR	51	51	0	0	3	3	8	8	0	24	2	2	18	18	10
APR	18	18	0	0	3	3	0	0	0	0	3	3	18	18	15
MAY	36	36	0	0	3	3	0	0	0	0	4	4	24	24	50