

Twelve-Month Forecast of CVP Generation and Base Resource
November 2018 Through October 2019
Values at Load Center (Tracy Substation)

Exceedence Level: 90% (Dry)

Month	CVP Generation		Project Use		First Preference		Reg & Res	Purchases and Exchanges						Base Resource		
	Maximum CVP Capacity (MW)	CVP Energy Generation (GWh)	Peak Project Use Demand (MW)	Project Use (PU) Load Energy (GWh)	First Pref. (FP) Peak Demand (MW)	First Pref. (FP) Load Energy (GWh)		Estimated Ancillary Services Capacity (MW)	PU Forward Purchase Off-Peak Energy (GWh)	PU & FP Capacity Purchase Reqmts. (MW)	Additional PU & FP Energy Purchase Reqmts. (GWh)	(This column for future use)	(This column for future use)	Ancillary Services Purchase Reqmt. (MW)	Project Capacity Available for BR (MW)	Energy Available for Base Resource (GWh)
Column	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Nov-2018	1285	160.0	125.0	130.0	26.4	15.6	182.0	0.0	0.0	0.0			0.0	951.6	14.4	2.1
Dec-2018	1220	150.0	120.0	135.0	26.6	16.0	182.0	0.0	0.0	1.0			0.0	891.4	0.0	0.0
Jan-2019	1385	130.0	105.0	125.0	26.0	16.0	182.0	0.0	0.0	11.0			0.0	1,072.0	0.0	0.0
Feb-2019	1425	140.0	40.0	20.0	26.7	15.0	182.0	0.0	0.0	0.0			0.0	1,176.3	105.0	13.3
Mar-2019	1135	180.0	30.0	20.0	24.7	14.7	182.0	0.0	0.0	0.0			0.0	898.3	145.3	21.7
Apr-2019	1295	360.0	40.0	25.0	23.8	13.7	182.0	0.0	0.0	0.0			0.0	1,049.2	321.3	42.5
May-2019	1295	430.0	55.0	35.0	21.9	13.9	182.0	0.0	0.0	0.0			0.0	1,036.1	381.1	49.4
Jun-2019	1570	530.0	45.0	30.0	23.9	12.9	182.0	0.0	0.0	0.0			0.0	1,319.1	487.1	51.3
Jul-2019	1495	510.0	65.0	25.0	27.9	15.2	182.0	0.0	0.0	0.0			0.0	1,220.1	469.8	51.8
Aug-2019	1385	400.0	90.0	40.0	26.6	14.8	182.0	0.0	0.0	0.0			0.0	1,086.4	345.2	42.7
Sep-2019	1220	250.0	95.0	45.0	23.2	13.2	182.0	0.0	0.0	0.0			0.0	919.8	191.8	29.0
Oct-2019	1030	230.0	100.0	55.0	23.8	13.8	182.0	0.0	0.0	0.0			0.0	724.2	161.2	29.9
Total		3,470.0		685.0		174.7		0.0		12.0					2,622.3	

Exceedence Level 50% (Average)

Month	CVP Generation		Project Use		First Preference		Reg & Res	Purchases and Exchanges						Base Resource		
	Maximum CVP Capacity (MW)	CVP Energy Generation (GWh)	Peak Project Use Demand (MW)	Project Use (PU) Load Energy (GWh)	First Pref. (FP) Peak Demand (MW)	First Pref. (FP) Load Energy (GWh)		Estimated Ancillary Services Capacity (MW)	PU Forward Purchase Off-Peak Energy (GWh)	PU & FP Capacity Purchase Reqmts. (MW)	Additional PU & FP Energy Purchase Reqmts. (GWh)	(This column for future use)	(This column for future use)	Ancillary Services Purchase Reqmt. (MW)	Project Capacity Available for BR (MW)	Energy Available for Base Resource (GWh)
Column	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Nov-2018	1295	170.0	170.0	155.0	26.4	15.6	182.0	0.0	0.0	0.6			0.0	916.6	0.0	0.0
Dec-2018	1240	160.0	190.0	180.0	26.6	16.0	182.0	0.0	0.0	36.0			0.0	841.4	0.0	0.0
Jan-2019	1435	160.0	80.0	80.0	26.0	16.0	182.0	0.0	0.0	0.0			0.0	1,147.0	64.0	7.5
Feb-2019	1525	190.0	65.0	40.0	26.7	15.0	182.0	0.0	0.0	0.0			0.0	1,251.3	135.0	16.1
Mar-2019	1045	270.0	90.0	65.0	24.7	14.7	182.0	0.0	0.0	0.0			0.0	748.3	190.3	34.2
Apr-2019	1380	380.0	55.0	40.0	23.8	13.7	182.0	0.0	0.0	0.0			0.0	1,119.2	326.3	40.5
May-2019	1390	550.0	85.0	60.0	21.9	13.9	182.0	0.0	0.0	0.0			0.0	1,101.1	476.1	58.1
Jun-2019	1705	610.0	190.0	125.0	23.9	12.9	182.0	0.0	0.0	0.0			0.0	1,309.1	472.1	50.1
Jul-2019	1690	650.0	235.0	155.0	27.9	15.2	182.0	0.0	0.0	0.0			0.0	1,245.1	479.8	51.8
Aug-2019	1635	530.0	220.0	140.0	26.6	14.8	182.0	0.0	0.0	0.0			0.0	1,206.4	375.2	41.8
Sep-2019	1445	380.0	170.0	110.0	23.2	13.2	182.0	0.0	0.0	0.0			0.0	1,069.8	256.8	33.3
Oct-2019	1265	350.0	165.0	130.0	23.8	13.8	182.0	0.0	0.0	0.0			0.0	894.2	206.2	31.0
Total		4,400.0		1,280.0		174.7		0.0		36.5					2,981.8	

Exceedence Level 10% (Wet)

Month	CVP Generation		Project Use		First Preference		Reg & Res	Purchases and Exchanges						Base Resource		
	Maximum CVP Capacity (MW)	CVP Energy Generation (GWh)	Peak Project Use Demand (MW)	Project Use (PU) Load Energy (GWh)	First Pref. (FP) Peak Demand (MW)	First Pref. (FP) Load Energy (GWh)		Estimated Ancillary Services Capacity (MW)	PU Forward Purchase Off-Peak Energy (GWh)	PU & FP Capacity Purchase Reqmts. (MW)	Additional PU & FP Energy Purchase Reqmts. (GWh)	(This column for future use)	(This column for future use)	Ancillary Services Purchase Reqmt. (MW)	Project Capacity Available for BR (MW)	Energy Available for Base Resource (GWh)
Column	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Nov-2018	1,807	690.0	258.0	151.0	23.8	13.7	182.0	0.0	0.0	0.0			0.0	1,343.2	525.3	54.3
Dec-2018	1,751	583.0	301.0	168.0	21.9	13.9	182.0	0.0	0.0	0.0			0.0	1,246.1	401.1	43.3
Jan-2019	1,679	395.0	265.0	117.0	23.9	12.9	182.0	0.0	0.0	0.0			0.0	1,208.1	265.1	30.5
Feb-2019	1,202	257.0	252.0	99.0	27.9	15.2	182.0	0.0	0.0	0.0			0.0	740.1	142.8	25.9
Mar-2019	1,347	215.0	288.0	104.0	26.6	14.8	182.0	0.0	0.0	0.0			0.0	850.4	96.2	15.2
Apr-2019	1,453	216.0	361.0	127.0	23.2	13.2	182.0	0.0	0.0	0.0			0.0	886.8	75.8	12.7
May-2019	1,557	285.0	367.0	130.0	23.8	13.8	182.0	0.0	0.0	0.0			0.0	984.2	141.2	19.3
Jun-2019	1,444	418.0	348.0	115.0	26.4	15.6	182.0	0.0	0.0	0.0			0.0	887.6	287.4	45.0
Jul-2019	1,631	392.0	360.0	132.0	26.6	16.0	182.0	0.0	0.0	0.0			0.0	1,062.4	244.0	30.9
Aug-2019	1,609	375.0	224.5	80.0	26.0	16.0	182.0	0.0	0.0	0.0			0.0	1,176.5	279.0	32.9
Sep-2019	1,747	554.0	149.0	57.0	26.7	15.0	182.0	0.0	0.0	0.0			0.0	1,389.3	482.0	46.6
Oct-2019	1,826	571.0	219.0	106.0	24.7	14.7	182.0	0.0	0.0	0.0			0.0	1,400.3	450.3	43.2
Total		4,951.0		1,386.0		174.7		0.0		0.0					3,390.3	

Notes:

- For the AS (Column G), it was assumed that Western's total operating reserve obligation to be equal to the sum of spinning reserve of 134 MW and regulation of 48 MW on average monthly long term basis.
- CVP generation & PU Load Energy for the 10% Exceedence Level based on Green Book ("Above Normal") values.