

Twelve-Month Forecast of CVP Generation and Base Resource
January 2019 Through December 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
Jan-2019	1390	140.0	125.0	145.0	26.0	16.0	182.0	0.0	0.0	21.0			0.0	1,057.0	0.0	0.0
Feb-2019	1285	120.0	135.0	120.0	26.7	15.0	182.0	0.0	0.0	15.0			0.0	941.3	0.0	0.0
Mar-2019	1180	160.0	55.0	30.0	24.7	14.7	182.0	0.0	0.0	0.0			0.0	918.3	115.3	16.9
Apr-2019	1320	350.0	35.0	20.0	23.8	13.7	182.0	0.0	0.0	0.0			0.0	1,079.2	316.3	40.7
May-2019	1320	460.0	50.0	25.0	21.9	13.9	182.0	0.0	0.0	0.0			0.0	1,066.1	421.1	53.1
Jun-2019	1605	560.0	65.0	35.0	23.9	12.9	182.0	0.0	0.0	0.0			0.0	1,334.1	512.1	53.3
Jul-2019	1530	520.0	50.0	35.0	27.9	15.2	182.0	0.0	0.0	0.0			0.0	1,270.1	469.8	49.7
Aug-2019	1445	430.0	90.0	60.0	26.6	14.8	182.0	0.0	0.0	0.0			0.0	1,146.4	355.2	41.6
Sep-2019	1260	260.0	140.0	105.0	23.2	13.2	182.0	0.0	0.0	0.0			0.0	914.8	141.8	21.5
Oct-2019	1070	180.0	125.0	95.0	23.8	13.8	182.0	0.0	0.0	0.0			0.0	739.2	71.2	12.9
Nov-2019	1145	150.0	85.0	70.0	26.4	15.6	182.0	0.0	0.0	0.0			0.0	851.6	64.4	10.5
Dec-2019	1095	160.0	80.0	75.0	26.6	16.0	182.0	0.0	0.0	0.0			0.0	806.4	69.0	11.5
Total		3,490.0		815.0		174.7		0.0		36.1					2,536.3	

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
Jan-2019	1435	140.0	105.0	130.0	26.0	16.0	182.0	0.0	0.0	6.0			0.0	1,122.0	0.0	0.0
Feb-2019	1345	180.0	180.0	155.0	26.7	15.0	182.0	0.0	0.0	0.0			0.0	956.3	10.0	1.6
Mar-2019	1055	270.0	115.0	105.0	24.7	14.7	182.0	0.0	0.0	0.0			0.0	733.3	150.3	27.6
Apr-2019	1385	400.0	55.0	40.0	23.8	13.7	182.0	0.0	0.0	0.0			0.0	1,124.2	346.3	42.8
May-2019	1385	530.0	85.0	60.0	21.9	13.9	182.0	0.0	0.0	0.0			0.0	1,096.1	456.1	55.9
Jun-2019	1695	570.0	190.0	125.0	23.9	12.9	182.0	0.0	0.0	0.0			0.0	1,299.1	432.1	46.2
Jul-2019	1675	610.0	235.0	155.0	27.9	15.2	182.0	0.0	0.0	0.0			0.0	1,230.1	439.8	48.1
Aug-2019	1625	510.0	220.0	140.0	26.6	14.8	182.0	0.0	0.0	0.0			0.0	1,196.4	355.2	39.9
Sep-2019	1440	390.0	175.0	115.0	23.2	13.2	182.0	0.0	0.0	0.0			0.0	1,059.8	261.8	34.3
Oct-2019	1255	260.0	170.0	130.0	23.8	13.8	182.0	0.0	0.0	0.0			0.0	879.2	116.2	17.8
Nov-2019	1335	200.0	85.0	55.0	26.4	15.6	182.0	0.0	0.0	0.0			0.0	1,041.6	129.4	17.3
Dec-2019	1270	190.0	80.0	75.0	26.6	16.0	182.0	0.0	0.0	0.0			0.0	981.4	99.0	13.6
Total		4,250.0		1,285.0		174.7		0.0		6.0					2,796.3	

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
Jan-2019	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
Feb-2019	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
Mar-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
Apr-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
May-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
Jun-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
Jul-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
Aug-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
Sep-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
Oct-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
Nov-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
Dec-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.