

Twelve-Month Forecast of CVP Generation and Base Resource
December 2018 Through November 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
Dec-2018	1215	170.0	105.0	115.0	26.6	16.0	182.0	0.0	0.0	0.0			0.0	901.4	39.0	5.8
Jan-2019	1375	130.0	105.0	125.0	26.0	16.0	182.0	0.0	0.0	11.0			0.0	1,062.0	0.0	0.0
Feb-2019	1415	140.0	40.0	20.0	26.7	15.0	182.0	0.0	0.0	0.0			0.0	1,166.3	105.0	13.4
Mar-2019	1130	170.0	30.0	20.0	24.7	14.7	182.0	0.0	0.0	0.0			0.0	893.3	135.3	20.4
Apr-2019	1290	360.0	40.0	25.0	23.8	13.7	182.0	0.0	0.0	0.0			0.0	1,044.2	321.3	42.7
May-2019	1290	420.0	50.0	35.0	21.9	13.9	182.0	0.0	0.0	0.0			0.0	1,036.1	371.1	48.1
Jun-2019	1565	530.0	35.0	20.0	23.9	12.9	182.0	0.0	0.0	0.0			0.0	1,324.1	497.1	52.1
Jul-2019	1495	500.0	35.0	20.0	27.9	15.2	182.0	0.0	0.0	0.0			0.0	1,250.1	464.8	50.0
Aug-2019	1380	400.0	60.0	35.0	26.6	14.8	182.0	0.0	0.0	0.0			0.0	1,111.4	350.2	42.4
Sep-2019	1205	250.0	95.0	65.0	23.2	13.2	182.0	0.0	0.0	0.0			0.0	904.8	171.8	26.4
Oct-2019	1015	190.0	145.0	95.0	23.8	13.8	182.0	0.0	0.0	0.0			0.0	664.2	81.2	16.4
Nov-2019	1095	180.0	125.0	105.0	26.4	15.6	182.0	0.0	0.0	0.0			0.0	761.6	59.4	10.8
Total		3,440.0		680.0		174.7		0.0		11.0					2,596.3	

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
Dec-2018	1235	160.0	165.0	160.0	26.6	16.0	182.0	0.0	0.0	16.0			0.0	861.4	0.0	0.0
Jan-2019	1425	140.0	105.0	130.0	26.0	16.0	182.0	0.0	0.0	6.0			0.0	1,112.0	0.0	0.0
Feb-2019	1330	170.0	135.0	120.0	26.7	15.0	182.0	0.0	0.0	0.0			0.0	986.3	35.0	5.3
Mar-2019	1040	240.0	90.0	65.0	24.7	14.7	182.0	0.0	0.0	0.0			0.0	743.3	160.3	29.0
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	660.0	235.0	155.0	27.9	15.2	182.0	0.0	0.0	0.0			0.0	1,245.1	489.8	52.9
Aug-2019	1635	520.0	220.0	140.0	26.6	14.8	182.0	0.0	0.0	0.0			0.0	1,206.4	365.2	40.7
Sep-2019	1445	390.0	170.0	110.0	23.2	13.2	182.0	0.0	0.0	0.0			0.0	1,069.8	266.8	34.6
Oct-2019	1260	280.0	170.0	130.0	23.8	13.8	182.0	0.0	0.0	0.0			0.0	884.2	136.2	20.7
Nov-2019	1345	300.0	145.0	130.0	26.4	15.6	182.0	0.0	0.0	0.0			0.0	991.6	154.4	21.6
Total		4,400.0		1,365.0		174.7		0.0		22.0					2,882.3	

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