

Twelve-Month Forecast of CVP Generation and Base Resource
February 2019 Through January 2020
Values at Load Center (Tracy Substation)

Exceedence Level: 90% (Dry)

Month	CVP Generation		Project Use		First Preference		Reg & Res	Purchases and Exchanges						Base Resource			
	CVP Maximum 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)	Capacity Factor (%)
Feb-2019	1285	130.0	110.0	85.0	25.6	17.2	182.0	0.0	0.0	0.0			0.0	967.4	27.8	4.3	
Mar-2019	1175	160.0	30.0	20.0	23.2	17.3	182.0	0.0	0.0	0.0			0.0	939.8	122.7	17.6	
Apr-2019	1330	400.0	35.0	20.0	20.7	14.9	182.0	0.0	0.0	0.0			0.0	1,092.3	365.1	46.4	
May-2019	1325	450.0	55.0	30.0	18.1	13.5	182.0	0.0	0.0	0.0			0.0	1,069.9	406.5	51.1	
Jun-2019	1615	590.0	65.0	40.0	19.2	13.8	182.0	0.0	0.0	0.0			0.0	1,348.8	536.2	55.2	
Jul-2019	1550	550.0	50.0	35.0	21.7	16.1	182.0	0.0	0.0	0.0			0.0	1,296.3	498.9	51.7	
Aug-2019	1470	440.0	95.0	65.0	20.5	15.3	182.0	0.0	0.0	0.0			0.0	1,172.5	359.7	41.2	
Sep-2019	1280	270.0	140.0	105.0	18.8	13.6	182.0	0.0	0.0	0.0			0.0	939.2	151.4	22.4	
Oct-2019	1090	180.0	125.0	110.0	18.5	13.8	182.0	0.0	0.0	0.0			0.0	764.5	56.2	9.9	
Nov-2019	1165	140.0	125.0	110.0	22.2	16.0	182.0	0.0	0.0	0.0			0.0	835.8	14.0	2.3	
Dec-2019	1105	120.0	125.0	145.0	23.5	17.5	182.0	0.0	0.0	42.5			0.0	774.5	0.0	0.0	
Jan-2020	1280	140.0	150.0	150.0	23.9	17.7	182.0	0.0	0.0	27.7			0.0	924.1	0.0	0.0	
Total		3,570.0		915.0		186.6		0.0		70.2					2,538.6		

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)	Capacity Factor (%)
Feb-2019	1335	140.0	180.0	155.0	25.6	17.2	182.0	0.0	0.0	32.2			0.0	947.4	0.0	0.0	
Mar-2019	1050	240.0	115.0	100.0	23.2	17.3	182.0	0.0	0.0	0.0			0.0	729.8	122.7	22.6	
Apr-2019	1380	380.0	55.0	40.0	20.7	14.9	182.0	0.0	0.0	0.0			0.0	1,122.3	325.1	40.2	
May-2019	1385	570.0	85.0	60.0	18.1	13.5	182.0	0.0	0.0	0.0			0.0	1,099.9	496.5	60.7	
Jun-2019	1690	580.0	190.0	125.0	19.2	13.8	182.0	0.0	0.0	0.0			0.0	1,298.8	441.2	47.2	
Jul-2019	1660	610.0	235.0	155.0	21.7	16.1	182.0	0.0	0.0	0.0			0.0	1,221.3	438.9	48.3	
Aug-2019	1600	490.0	220.0	140.0	20.5	15.3	182.0	0.0	0.0	0.0			0.0	1,177.5	334.7	38.2	
Sep-2019	1425	380.0	175.0	115.0	18.8	13.6	182.0	0.0	0.0	0.0			0.0	1,049.2	251.4	33.3	
Oct-2019	1235	260.0	170.0	130.0	18.5	13.8	182.0	0.0	0.0	0.0			0.0	864.5	116.2	18.1	
Nov-2019	1310	190.0	125.0	95.0	22.2	16.0	182.0	0.0	0.0	0.0			0.0	980.8	79.0	11.2	
Dec-2019	1245	170.0	180.0	145.0	23.5	17.5	182.0	0.0	0.0	0.0			0.0	859.5	7.5	1.2	
Jan-2020	1460	150.0	125.0	125.0	23.9	17.7	182.0	0.0	0.0	0.0			0.0	1,129.1	7.3	0.9	
Total		4,160.0		1,385.0		186.6		0.0		32.2					2,620.6		

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.
- Exceedence Level 10% does not have updated forecast from Bureau so has been removed from forecasts.