

Wind and Solar Curtailment June 20, 2023

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why¹. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation².

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion³.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply⁴.
3. SelfSchCut - Local: Market dispatch of self-schedules to mitigate local congestion.
4. SelfSchCut - System: Market dispatch of self-schedules to mitigate system-wide oversupply.
5. ExDispatch - Local: Exceptional dispatch to mitigate local congestion.
6. ExDispatch - System: Exceptional dispatch to mitigate system-wide oversupply.

Note: Amounts smaller than 1 MW are filtered out for simplicity. Such small curtailments are occasionally observed when forecasts are lower than Pmin when market will de-commit the unit and send the 0 MW dispatch.

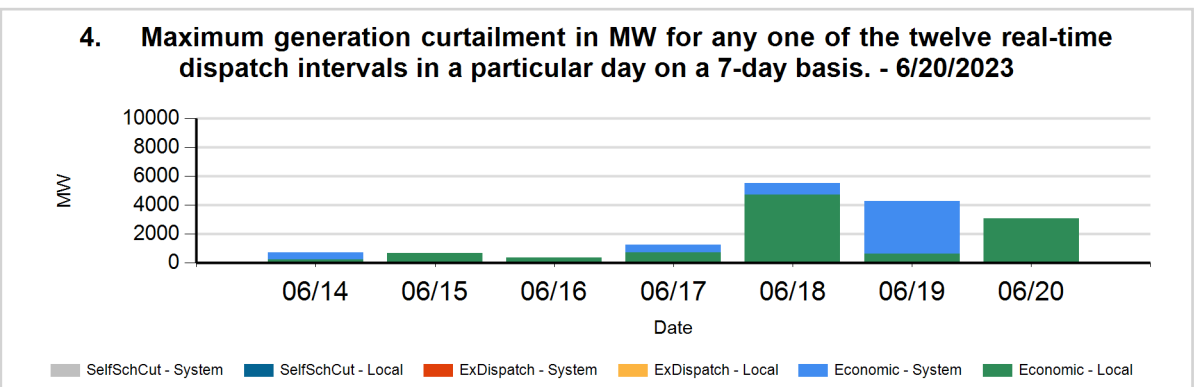
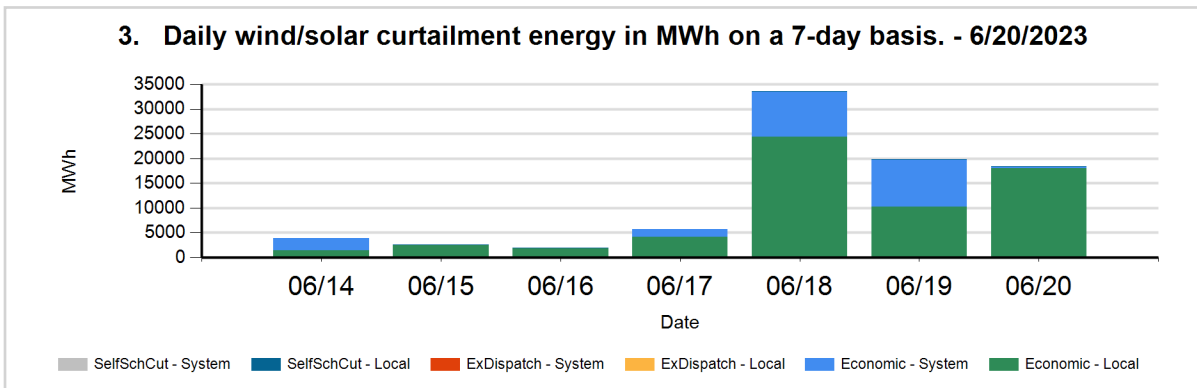
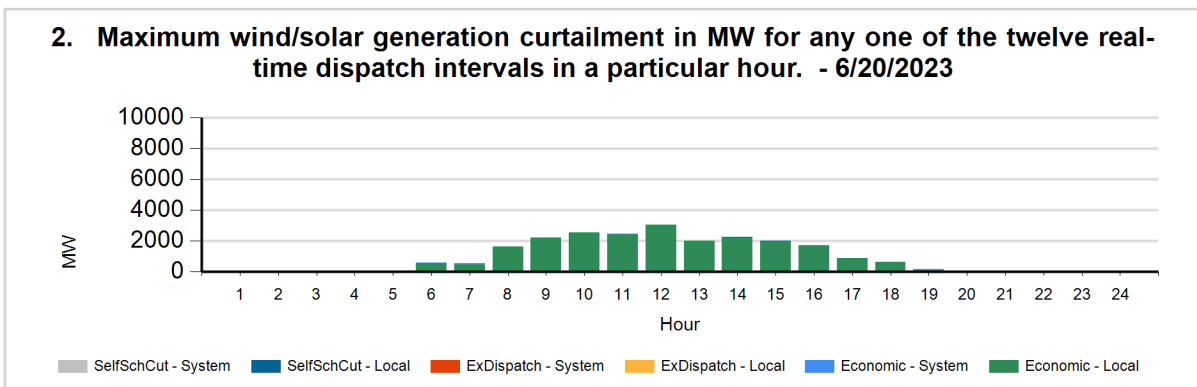
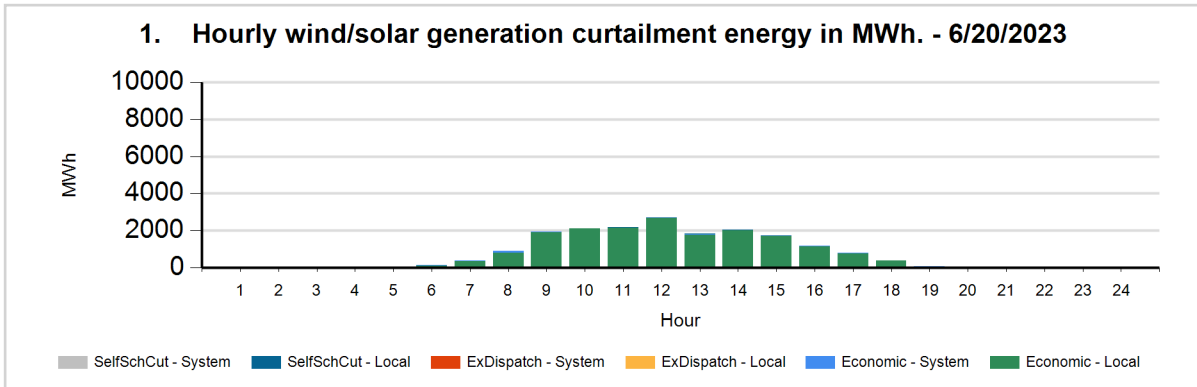
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

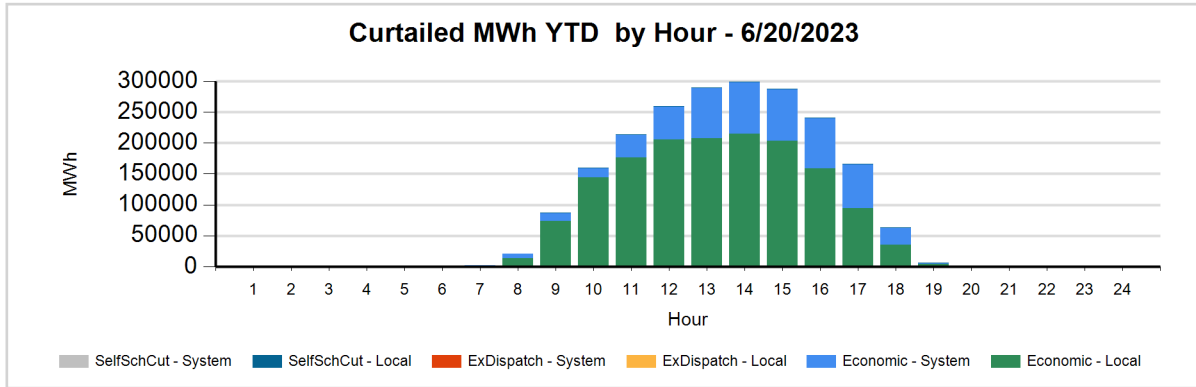
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

⁴For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

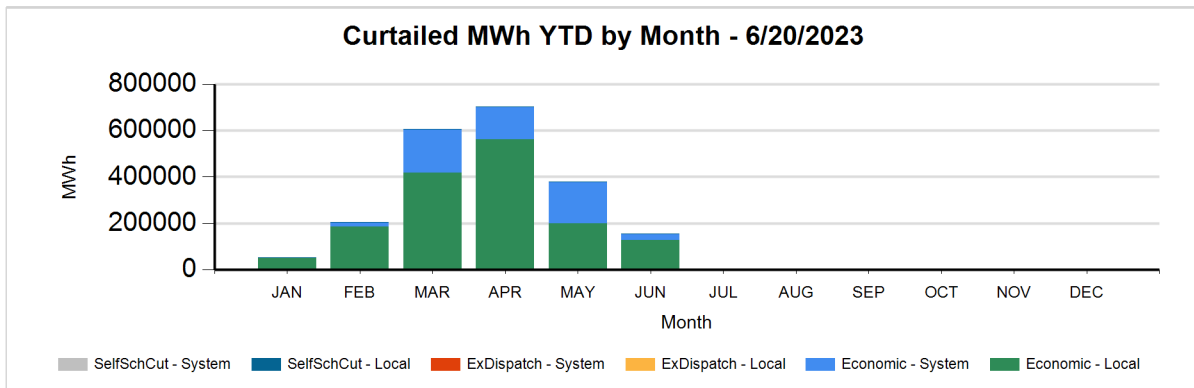
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



The following charts show hourly year to date wind and solar curtailment by category, if any.



The following charts show monthly year to date wind and solar curtailment by category, if any.



TYPE	YTD CURTAILED MWH - 6/20/2023
LocalEconomic	1,536,617
LocalSelfSchCut	803
SystemEconomic	563,490
TOTAL	2,100,909

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/20	1	Economic	Local	WIND	6	9
06/20	2	Economic	Local	WIND	3	7
06/20	6	Economic	Local	WIND	118	556
06/20	6	Economic	System	SOLR	4	8
06/20	6	Economic	System	WIND	6	
06/20	7	Economic	Local	SOLR	65	1
06/20	7	Economic	Local	WIND	277	441
06/20	7	Economic	System	SOLR	25	80
06/20	8	Economic	Local	SOLR	553	1598
06/20	8	Economic	Local	WIND	225	15
06/20	8	Economic	System	SOLR	123	
06/20	9	Economic	Local	SOLR	1846	2139
06/20	9	Economic	Local	WIND	61	73
06/20	9	Economic	System	SOLR	26	
06/20	9	Economic	System	WIND	13	
06/20	10	Economic	Local	SOLR	2046	2474
06/20	10	Economic	Local	WIND	73	74
06/20	10	Economic	System	WIND	0	
06/20	11	Economic	Local	SOLR	2114	2382
06/20	11	Economic	Local	WIND	72	73
06/20	11	Economic	System	WIND	4	4
06/20	11	SelfSchCut	Local	SOLR	2	
06/20	12	Economic	Local	SOLR	2620	2956
06/20	12	Economic	Local	WIND	83	88
06/20	12	SelfSchCut	Local	SOLR	1	
06/20	13	Economic	Local	SOLR	1676	1923
06/20	13	Economic	Local	WIND	77	67
06/20	13	Economic	System	SOLR	60	
06/20	13	SelfSchCut	Local	SOLR	4	
06/20	14	Economic	Local	SOLR	1888	2098
06/20	14	Economic	Local	WIND	138	156

06/20	14	Economic	System	SOLR	14	
06/20	14	Economic	System	WIND	6	
06/20	14	SelfSchCut	Local	SOLR	6	8
06/20	15	Economic	Local	SOLR	1549	1838
06/20	15	Economic	Local	WIND	128	155
06/20	15	Economic	System	SOLR	43	
06/20	15	Economic	System	WIND	11	
06/20	15	SelfSchCut	Local	SOLR	4	10
06/20	16	Economic	Local	SOLR	1070	1585
06/20	16	Economic	Local	WIND	100	119
06/20	16	Economic	System	SOLR	3	
06/20	16	Economic	System	WIND	3	
06/20	17	Economic	Local	SOLR	691	783
06/20	17	Economic	Local	WIND	84	90
06/20	17	Economic	System	SOLR	5	
06/20	17	Economic	System	WIND	3	
06/20	18	Economic	Local	SOLR	358	576
06/20	18	Economic	Local	WIND	3	29
06/20	19	Economic	Local	SOLR	44	66
06/20	19	Economic	System	SOLR	26	85
06/20	20	Economic	System	SOLR	3	30
06/20	21	Economic	Local	SOLR	0	
06/20	21	Economic	Local	WIND	3	8
06/20	21	Economic	System	SOLR	0	
06/20	22	Economic	Local	WIND	8	9
06/20	23	Economic	Local	WIND	8	9
06/20	24	Economic	Local	WIND	8	9

The information contained in this report is preliminary and subject to change without notice. No inference, decision or conclusion should be made based on the information in this report or any series of these reports. All values are hourly average unless otherwise stated. Questions about this report should be directed to Short-Term Forecasting at ShortTermForecasting@caiso.com.



California ISO