

## Wind and Solar Curtailment June 19, 2023

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why<sup>1</sup>. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation<sup>2</sup>.

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion<sup>3</sup>.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply<sup>4</sup>.
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.

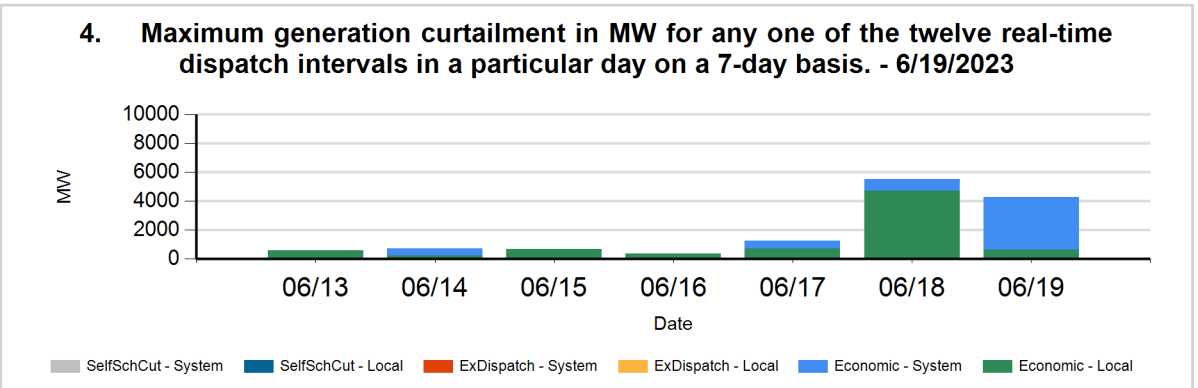
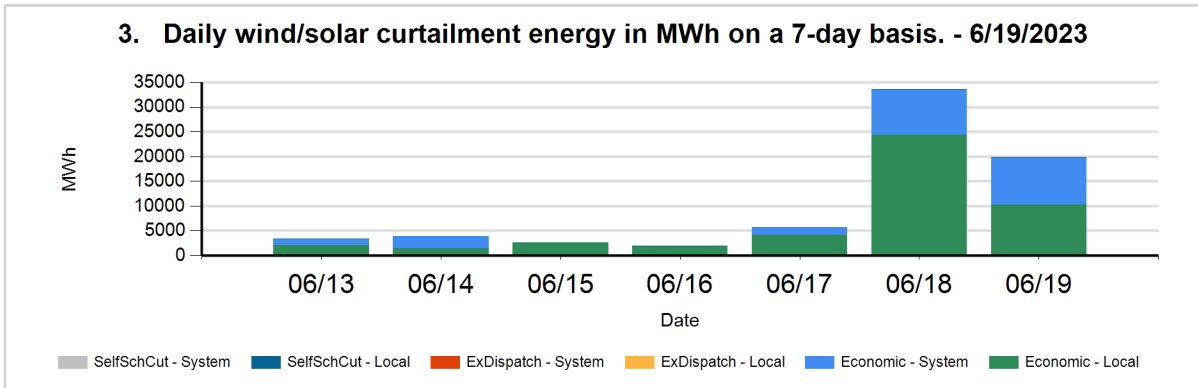
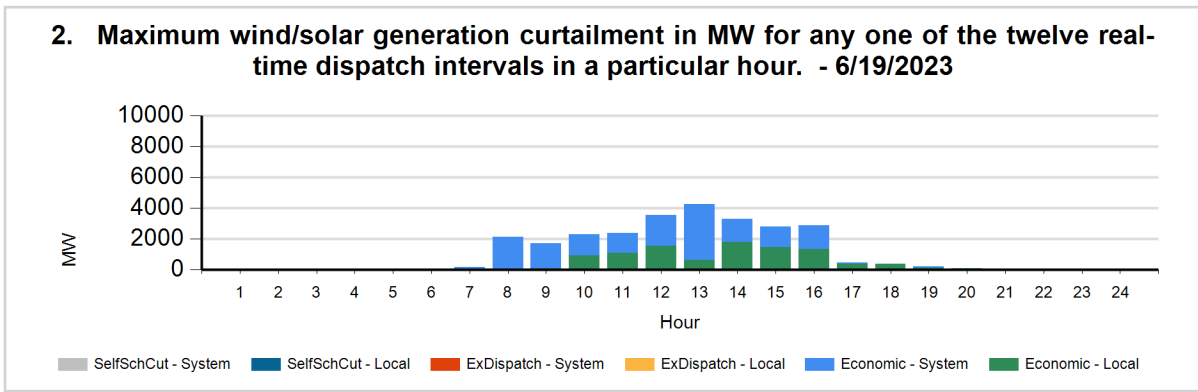
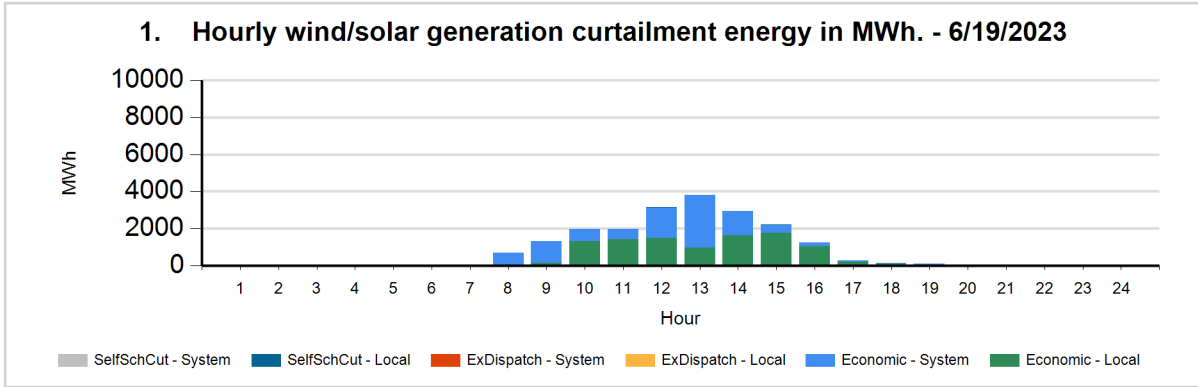
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

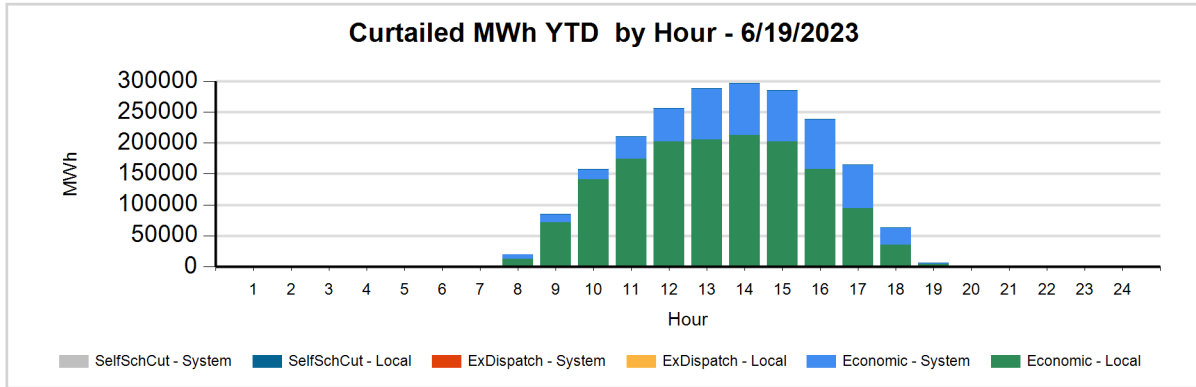
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<sup>4</sup>For more information on oversupply conditions, please see: [https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf)

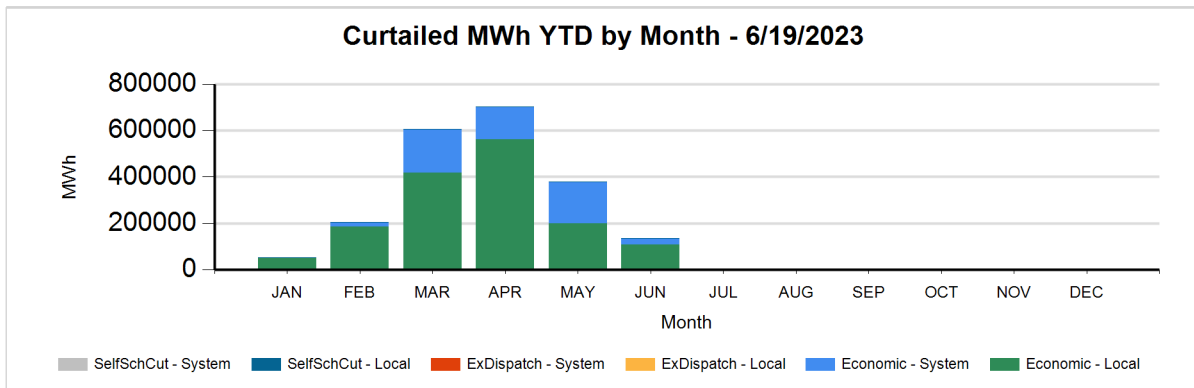
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 6/19/2023
LocalEconomic	1,518,622
LocalSelfSchCut	785
SystemEconomic	563,111
TOTAL	2,082,519

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/19	1	Economic	Local	WIND	6	7
06/19	2	Economic	Local	WIND	6	6
06/19	3	Economic	Local	WIND	6	41
06/19	4	Economic	Local	WIND	6	7
06/19	5	Economic	Local	WIND	6	7
06/19	6	Economic	Local	WIND	6	6
06/19	7	Economic	Local	SOLR	7	
06/19	7	Economic	Local	WIND	6	
06/19	7	Economic	System	SOLR	19	116
06/19	7	Economic	System	WIND	6	47
06/19	8	Economic	Local	SOLR	37	58
06/19	8	Economic	Local	WIND	0	
06/19	8	Economic	System	SOLR	610	1983
06/19	8	Economic	System	WIND	52	82
06/19	9	Economic	Local	SOLR	132	97
06/19	9	Economic	System	SOLR	1013	1482
06/19	9	Economic	System	WIND	160	126
06/19	10	Economic	Local	SOLR	1271	868
06/19	10	Economic	Local	WIND	49	56
06/19	10	Economic	System	SOLR	569	1226
06/19	10	Economic	System	WIND	91	124
06/19	11	Economic	Local	SOLR	1312	999
06/19	11	Economic	Local	WIND	86	63
06/19	11	Economic	System	SOLR	488	1225
06/19	11	Economic	System	WIND	67	106
06/19	11	SelfSchCut	Local	SOLR	0	
06/19	12	Economic	Local	SOLR	1428	1475
06/19	12	Economic	Local	WIND	72	51
06/19	12	Economic	System	SOLR	1513	1787
06/19	12	Economic	System	WIND	125	220
06/19	12	SelfSchCut	Local	SOLR	1	

06/19	13	Economic	Local	SOLR	924	579
06/19	13	Economic	Local	WIND	35	37
06/19	13	Economic	System	SOLR	2653	3397
06/19	13	Economic	System	WIND	197	229
06/19	14	Economic	Local	SOLR	1561	1771
06/19	14	Economic	Local	WIND	47	19
06/19	14	Economic	System	SOLR	1213	1357
06/19	14	Economic	System	WIND	107	159
06/19	15	Economic	Local	SOLR	1673	1388
06/19	15	Economic	Local	WIND	90	64
06/19	15	Economic	System	SOLR	367	1226
06/19	15	Economic	System	WIND	67	104
06/19	15	SelfSchCut	Local	SOLR	1	
06/19	16	Economic	Local	SOLR	967	1259
06/19	16	Economic	Local	WIND	75	56
06/19	16	Economic	System	SOLR	131	1462
06/19	16	Economic	System	WIND	60	103
06/19	17	Economic	Local	SOLR	199	355
06/19	17	Economic	System	SOLR	35	17
06/19	17	Economic	System	WIND	24	76
06/19	18	Economic	Local	SOLR	114	272
06/19	18	Economic	Local	WIND	23	91
06/19	18	Economic	System	SOLR	4	
06/19	18	Economic	System	WIND	3	
06/19	19	Economic	Local	SOLR	37	113
06/19	19	Economic	Local	WIND	10	9
06/19	19	Economic	System	SOLR	40	63
06/19	20	Economic	Local	SOLR	6	49
06/19	20	Economic	Local	WIND	11	34
06/19	20	Economic	System	SOLR	2	
06/19	21	Economic	Local	WIND	9	9
06/19	21	Economic	System	SOLR	0	2
06/19	22	Economic	Local	WIND	8	9
06/19	23	Economic	Local	WIND	6	9



06/19	24	Economic	Local	WIND		6	9
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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](mailto:ShortTermForecasting@caiso.com).