

## Wind and Solar Curtailment June 25, 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.

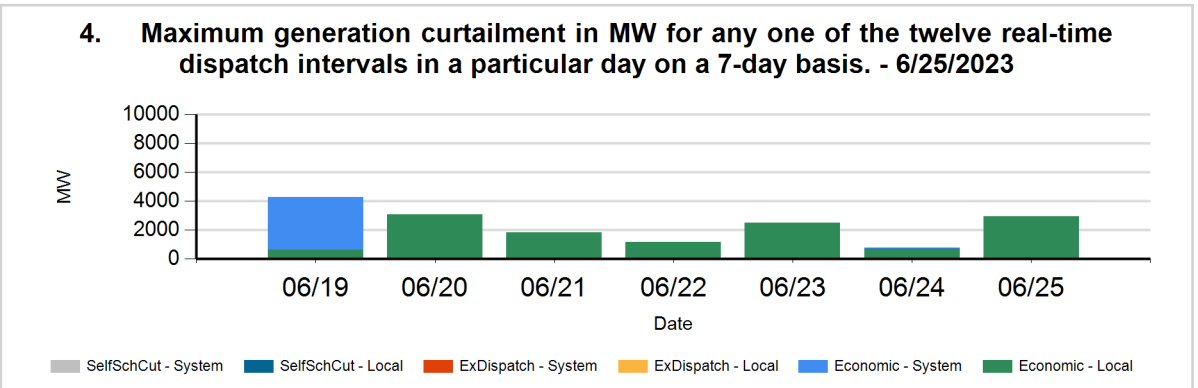
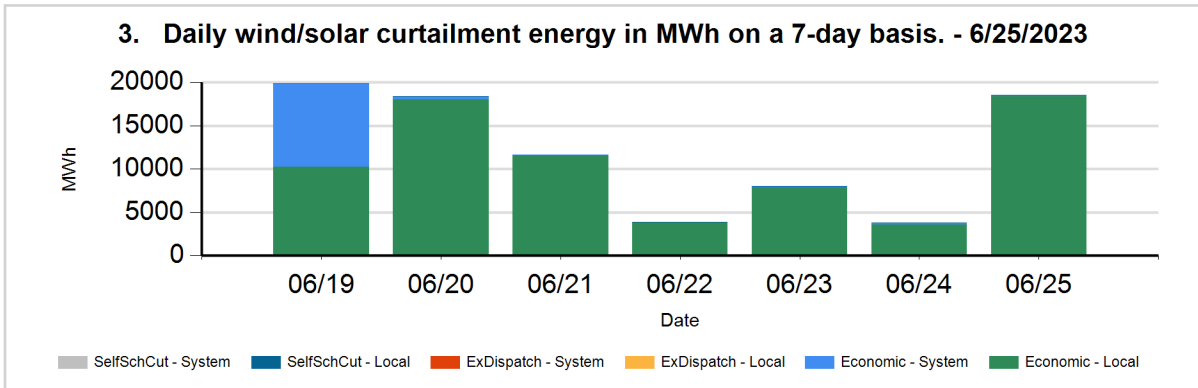
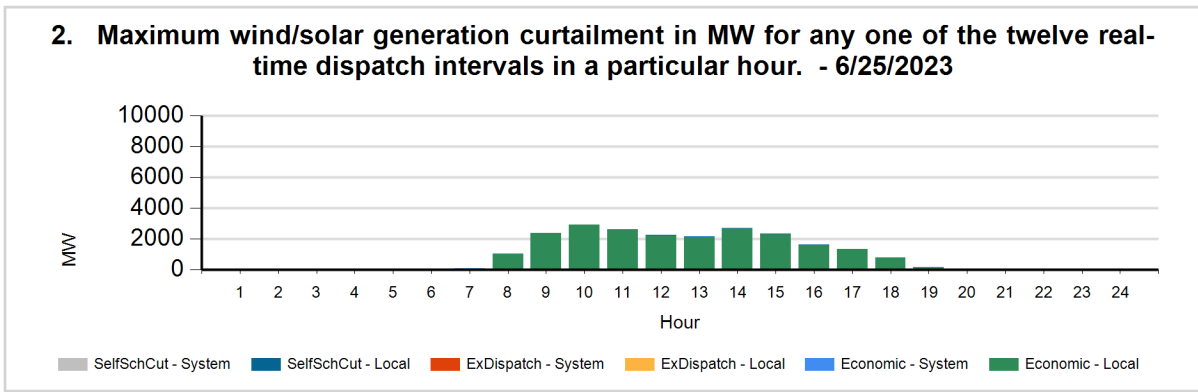
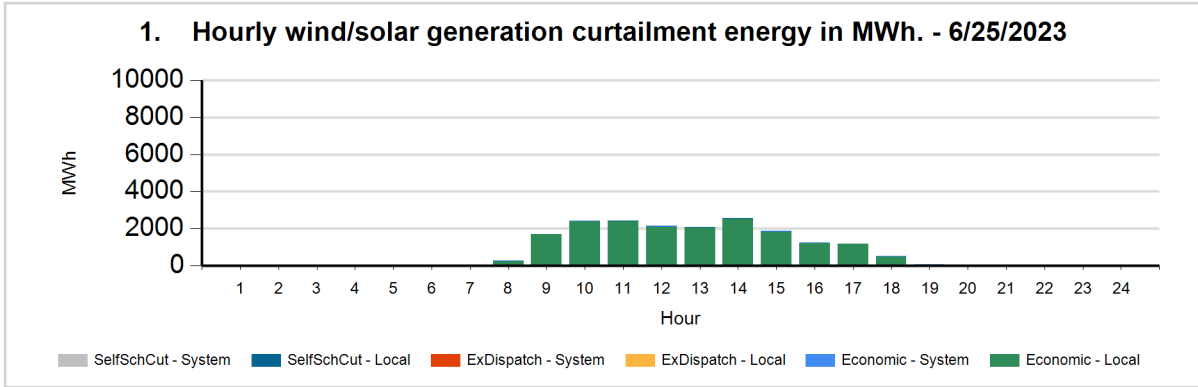
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

<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.

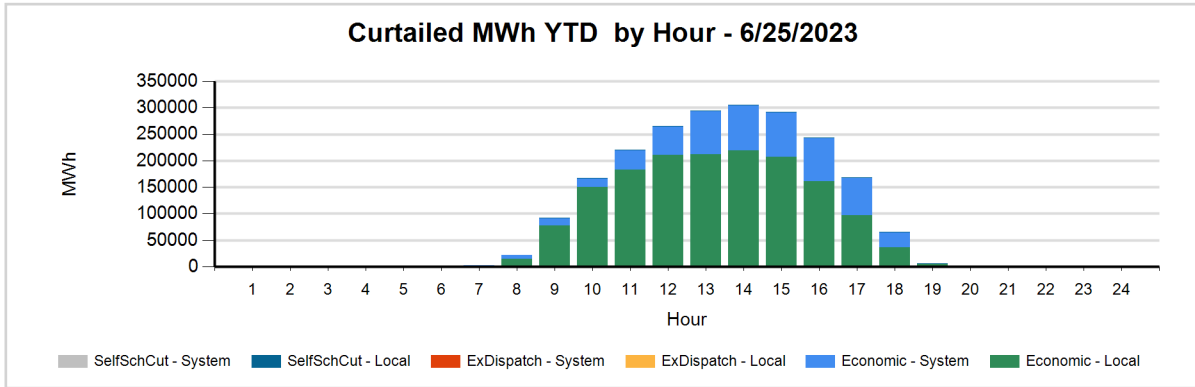
<sup>4</sup>For more information on oversupply conditions, please see:

[https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf)

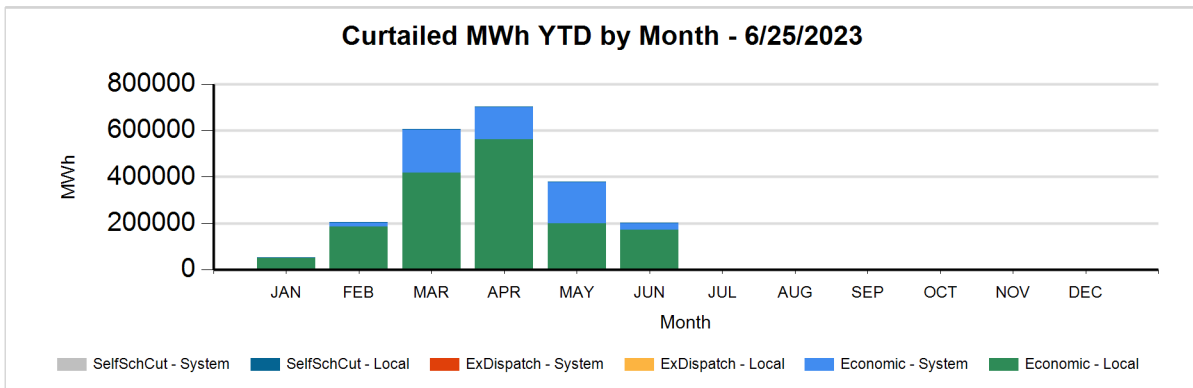
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 6/25/2023
LocalEconomic	1,581,800
LocalSelfSchCut	837
SystemEconomic	564,025
TOTAL	2,146,662

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/25	1	Economic	Local	WIND	4	5
06/25	2	Economic	Local	WIND	4	5
06/25	3	Economic	Local	WIND	4	4
06/25	4	Economic	Local	WIND	4	4
06/25	5	Economic	Local	WIND	4	4
06/25	6	Economic	Local	WIND	4	4
06/25	7	Economic	Local	SOLR	8	
06/25	7	Economic	Local	WIND	3	2
06/25	7	Economic	System	SOLR	12	96
06/25	8	Economic	Local	SOLR	270	984
06/25	8	Economic	Local	WIND	18	42
06/25	8	Economic	System	SOLR	0	
06/25	8	Economic	System	WIND	1	3
06/25	9	Economic	Local	SOLR	1639	2320
06/25	9	Economic	Local	WIND	66	69
06/25	10	Economic	Local	SOLR	2339	2875
06/25	10	Economic	Local	WIND	65	61
06/25	10	Economic	System	WIND	1	
06/25	11	Economic	Local	SOLR	2353	2539
06/25	11	Economic	Local	WIND	65	67
06/25	11	Economic	System	WIND	7	11
06/25	11	SelfSchCut	Local	SOLR	1	
06/25	12	Economic	Local	SOLR	2049	2168
06/25	12	Economic	Local	WIND	69	67
06/25	12	Economic	System	WIND	2	4
06/25	12	SelfSchCut	Local	SOLR	4	5
06/25	13	Economic	Local	SOLR	1999	2110
06/25	13	Economic	Local	WIND	67	67
06/25	13	Economic	System	WIND	2	2
06/25	13	SelfSchCut	Local	SOLR	3	
06/25	14	Economic	Local	SOLR	2493	2632

06/25	14	Economic	Local	WIND	67	67
06/25	14	Economic	System	WIND	4	6
06/25	14	SelfSchCut	Local	SOLR	3	
06/25	15	Economic	Local	SOLR	1743	2260
06/25	15	Economic	Local	WIND	67	68
06/25	15	Economic	System	SOLR	40	
06/25	15	Economic	System	WIND	1	
06/25	15	SelfSchCut	Local	SOLR	3	8
06/25	16	Economic	Local	SOLR	1219	1560
06/25	16	Economic	Local	WIND	12	51
06/25	16	Economic	System	WIND	1	6
06/25	16	SelfSchCut	Local	SOLR	0	2
06/25	17	Economic	Local	SOLR	1167	1314
06/25	17	Economic	Local	WIND	2	2
06/25	17	Economic	System	SOLR	0	
06/25	18	Economic	Local	SOLR	521	803
06/25	18	Economic	Local	WIND	2	2
06/25	18	Economic	System	SOLR	1	4
06/25	18	Economic	System	WIND	2	
06/25	19	Economic	Local	SOLR	45	141
06/25	19	Economic	Local	WIND	3	4
06/25	19	Economic	System	SOLR	1	5
06/25	19	Economic	System	WIND	2	
06/25	20	Economic	Local	WIND	5	5
06/25	21	Economic	Local	WIND	4	5
06/25	21	Economic	System	SOLR	0	3
06/25	21	Economic	System	WIND	1	
06/25	22	Economic	Local	WIND	5	5
06/25	23	Economic	Local	WIND	5	5
06/25	24	Economic	Local	WIND	4	4

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).

