

## Wind and Solar Curtailment April 17, 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.

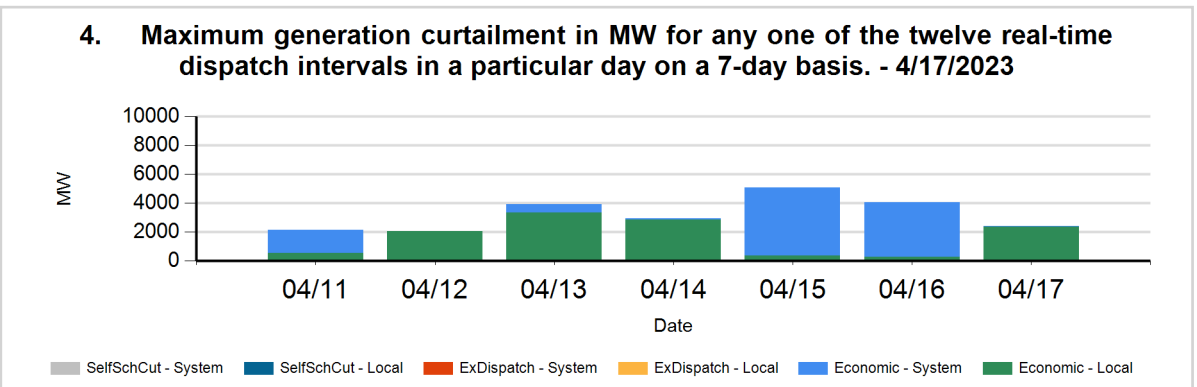
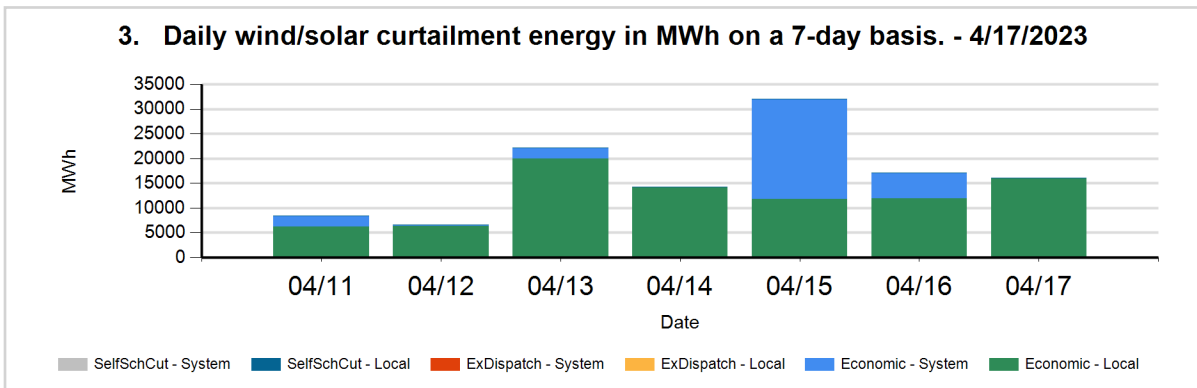
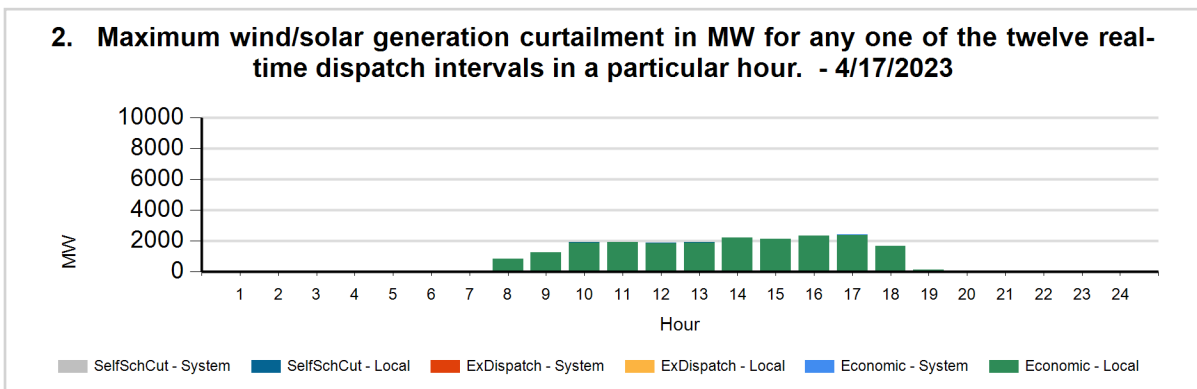
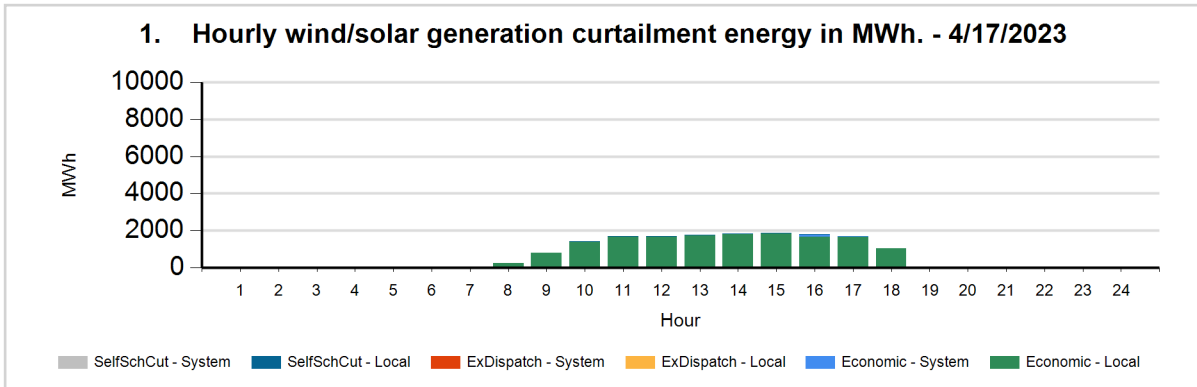
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

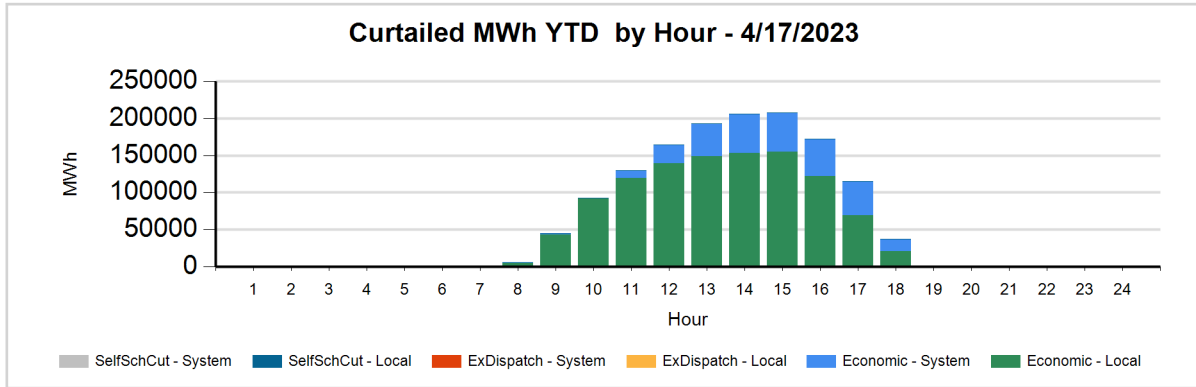
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

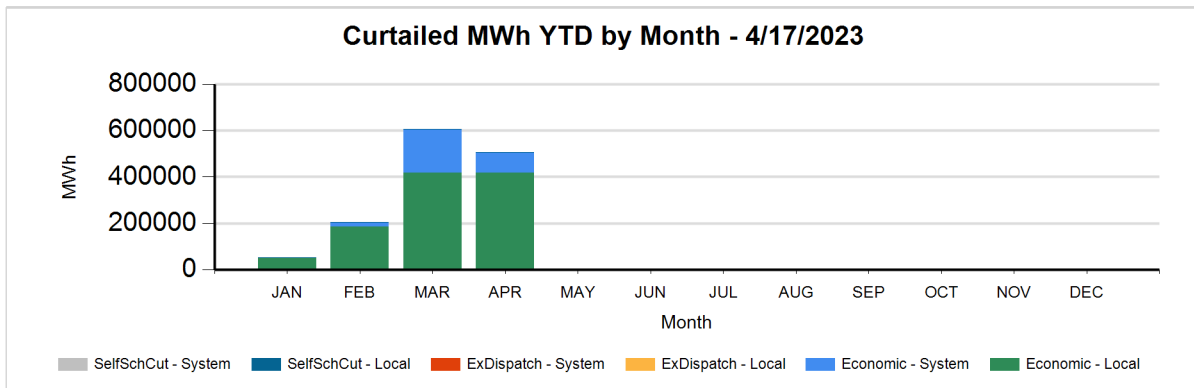
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/17/2023
LocalEconomic	1,070,134
LocalSelfSchCut	240
SystemEconomic	299,781
<b>TOTAL</b>	<b>1,370,156</b>

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/17	1	Economic	Local	WIND	9	10
04/17	2	Economic	Local	WIND	9	10
04/17	3	Economic	Local	WIND	8	8
04/17	4	Economic	Local	WIND	8	9
04/17	5	Economic	Local	WIND	9	9
04/17	6	Economic	Local	WIND	9	10
04/17	7	Economic	Local	WIND	6	10
04/17	7	Economic	System	WIND	1	
04/17	8	Economic	Local	SOLR	224	725
04/17	8	Economic	Local	WIND	21	118
04/17	9	Economic	Local	SOLR	791	1216
04/17	9	Economic	Local	WIND	17	13
04/17	10	Economic	Local	SOLR	1387	1878
04/17	10	Economic	Local	WIND	16	14
04/17	10	SelfSchCut	Local	SOLR	1	5
04/17	11	Economic	Local	SOLR	1678	1840
04/17	11	Economic	Local	WIND	19	68
04/17	11	SelfSchCut	Local	SOLR	2	
04/17	12	Economic	Local	SOLR	1662	1830
04/17	12	Economic	Local	WIND	14	14
04/17	12	SelfSchCut	Local	SOLR	4	9
04/17	13	Economic	Local	SOLR	1755	1889
04/17	13	Economic	Local	WIND	14	14
04/17	13	SelfSchCut	Local	SOLR	3	9
04/17	14	Economic	Local	SOLR	1814	2091
04/17	14	Economic	Local	WIND	31	130
04/17	14	SelfSchCut	Local	SOLR	2	
04/17	15	Economic	Local	SOLR	1720	1995
04/17	15	Economic	Local	WIND	126	129
04/17	15	Economic	System	SOLR	19	
04/17	15	Economic	System	WIND	9	

04/17	15	SelfSchCut	Local	SOLR	3	
04/17	16	Economic	Local	SOLR	1404	1898
04/17	16	Economic	Local	WIND	269	423
04/17	16	Economic	System	SOLR	53	
04/17	16	Economic	System	WIND	61	
04/17	16	SelfSchCut	Local	SOLR	1	
04/17	17	Economic	Local	SOLR	1445	1921
04/17	17	Economic	Local	WIND	238	444
04/17	17	Economic	System	WIND	5	38
04/17	17	SelfSchCut	Local	SOLR	0	
04/17	18	Economic	Local	SOLR	991	1518
04/17	18	Economic	Local	WIND	57	132
04/17	18	SelfSchCut	Local	SOLR	0	
04/17	19	Economic	Local	SOLR	21	93
04/17	19	Economic	Local	WIND	26	26
04/17	20	Economic	Local	WIND	26	26
04/17	21	Economic	Local	WIND	25	26
04/17	22	Economic	Local	WIND	25	25
04/17	23	Economic	Local	WIND	25	25
04/17	24	Economic	Local	WIND	23	25

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).