

## Wind and Solar Curtailment May 31, 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.

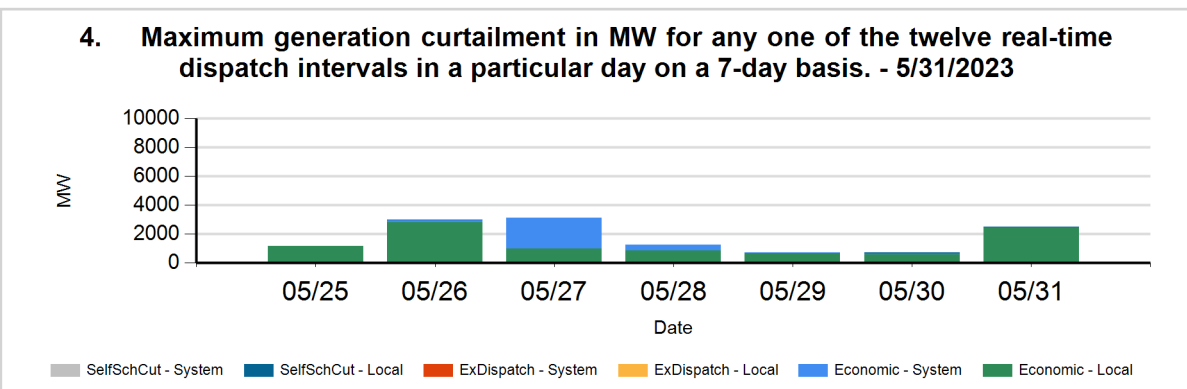
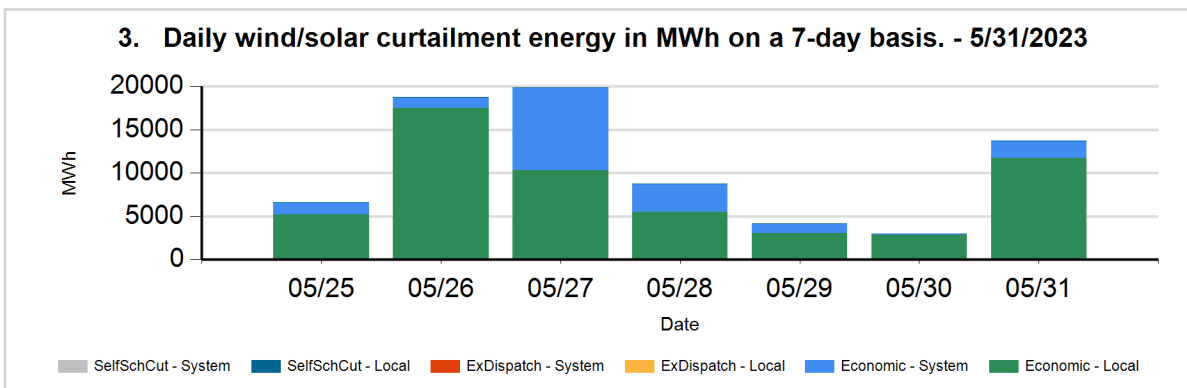
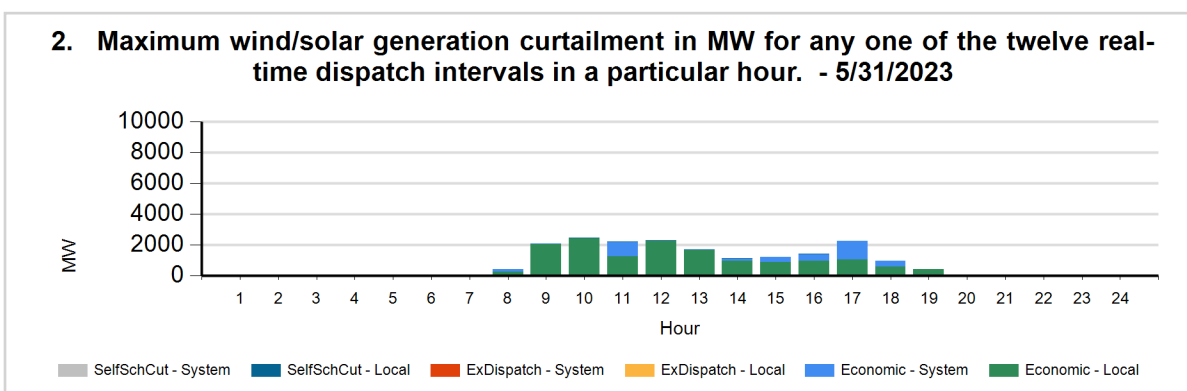
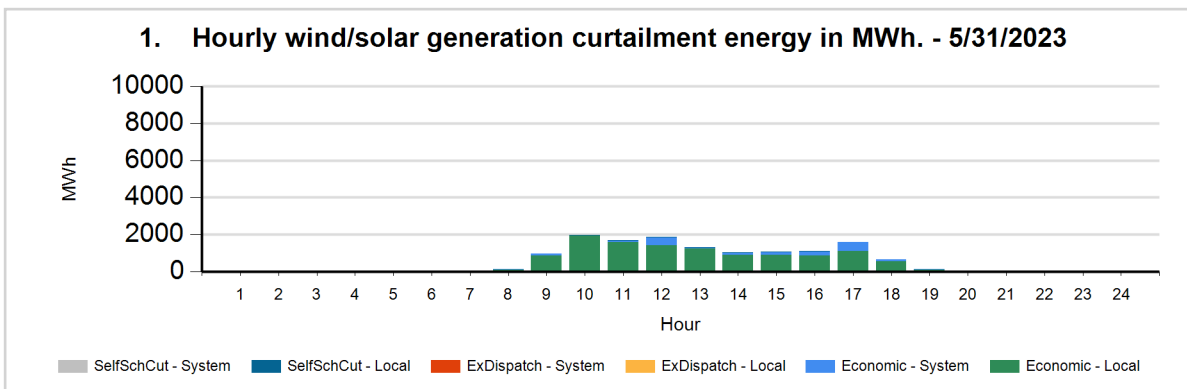
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

<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.

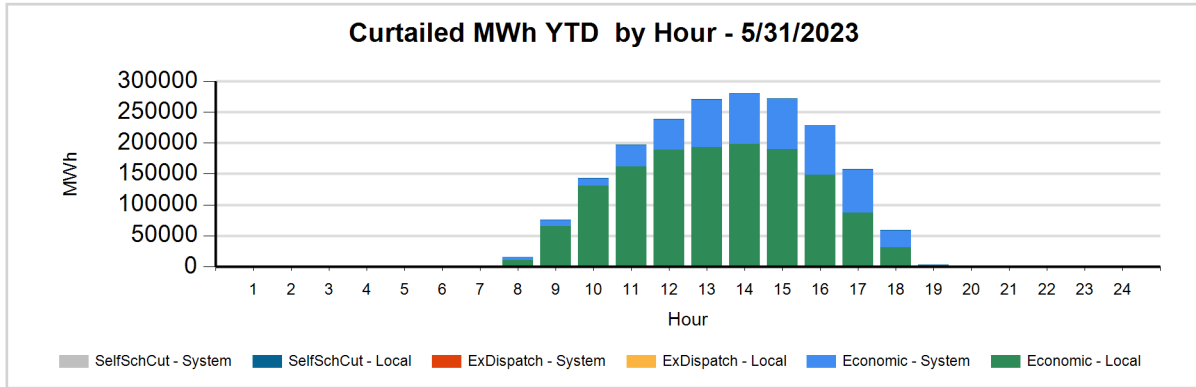
<sup>4</sup>For more information on oversupply conditions, please see:

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

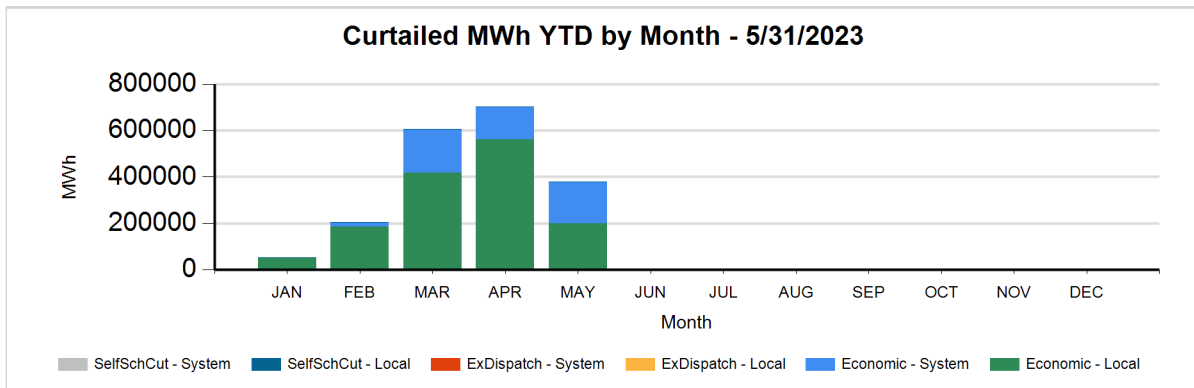
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/31/2023
LocalEconomic	1,410,787
LocalSelfSchCut	625
SystemEconomic	534,658
TOTAL	1,946,070

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/31	1	Economic	Local	WIND	13	14
05/31	2	Economic	Local	WIND	14	14
05/31	3	Economic	Local	WIND	13	14
05/31	4	Economic	Local	WIND	13	13
05/31	5	Economic	Local	WIND	13	13
05/31	6	Economic	Local	WIND	13	13
05/31	7	Economic	Local	WIND	13	13
05/31	7	Economic	System	SOLR	1	6
05/31	8	Economic	Local	SOLR	73	212
05/31	8	Economic	Local	WIND	16	16
05/31	8	Economic	System	SOLR	45	91
05/31	8	Economic	System	WIND	18	82
05/31	9	Economic	Local	SOLR	776	1925
05/31	9	Economic	Local	WIND	71	160
05/31	9	Economic	System	SOLR	50	
05/31	9	Economic	System	WIND	79	10
05/31	10	Economic	Local	SOLR	1858	2330
05/31	10	Economic	Local	WIND	67	128
05/31	10	Economic	System	SOLR	45	
05/31	10	Economic	System	WIND	14	
05/31	10	SelfSchCut	Local	SOLR	1	4
05/31	11	Economic	Local	SOLR	1550	1263
05/31	11	Economic	Local	WIND	55	
05/31	11	Economic	System	SOLR	67	806
05/31	11	Economic	System	WIND	23	123
05/31	11	SelfSchCut	Local	SOLR	4	5
05/31	12	Economic	Local	SOLR	1398	2178
05/31	12	Economic	Local	WIND	29	98
05/31	12	Economic	System	SOLR	401	
05/31	12	Economic	System	WIND	45	15
05/31	12	SelfSchCut	Local	SOLR	5	3

05/31	13	Economic	Local	SOLR	1185	1661
05/31	13	Economic	Local	WIND	69	27
05/31	13	Economic	System	SOLR	29	
05/31	13	Economic	System	WIND	20	6
05/31	13	SelfSchCut	Local	SOLR	1	
05/31	14	Economic	Local	SOLR	901	949
05/31	14	Economic	Local	WIND	3	
05/31	14	Economic	System	SOLR	76	110
05/31	14	Economic	System	WIND	48	44
05/31	14	SelfSchCut	Local	SOLR	1	1
05/31	15	Economic	Local	SOLR	891	878
05/31	15	Economic	Local	WIND	9	
05/31	15	Economic	System	SOLR	80	210
05/31	15	Economic	System	WIND	82	103
05/31	15	SelfSchCut	Local	SOLR	1	
05/31	16	Economic	Local	SOLR	864	936
05/31	16	Economic	Local	WIND	6	
05/31	16	Economic	System	SOLR	100	242
05/31	16	Economic	System	WIND	128	222
05/31	16	SelfSchCut	Local	SOLR	2	5
05/31	17	Economic	Local	SOLR	1072	1040
05/31	17	Economic	Local	WIND	28	
05/31	17	Economic	System	SOLR	392	1008
05/31	17	Economic	System	WIND	111	186
05/31	18	Economic	Local	SOLR	529	567
05/31	18	Economic	Local	WIND	17	
05/31	18	Economic	System	SOLR	51	193
05/31	18	Economic	System	WIND	45	182
05/31	19	Economic	Local	SOLR	100	385
05/31	19	Economic	Local	WIND	10	12
05/31	19	Economic	System	SOLR	26	
05/31	19	Economic	System	WIND	2	
05/31	20	Economic	Local	SOLR	7	33
05/31	20	Economic	Local	WIND	9	8

05/31	21	Economic	Local	WIND	7	7
05/31	22	Economic	Local	WIND	7	7
05/31	23	Economic	Local	WIND	7	7
05/31	24	Economic	Local	WIND	6	7

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).