

## Wind and Solar Curtailment May 04, 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.

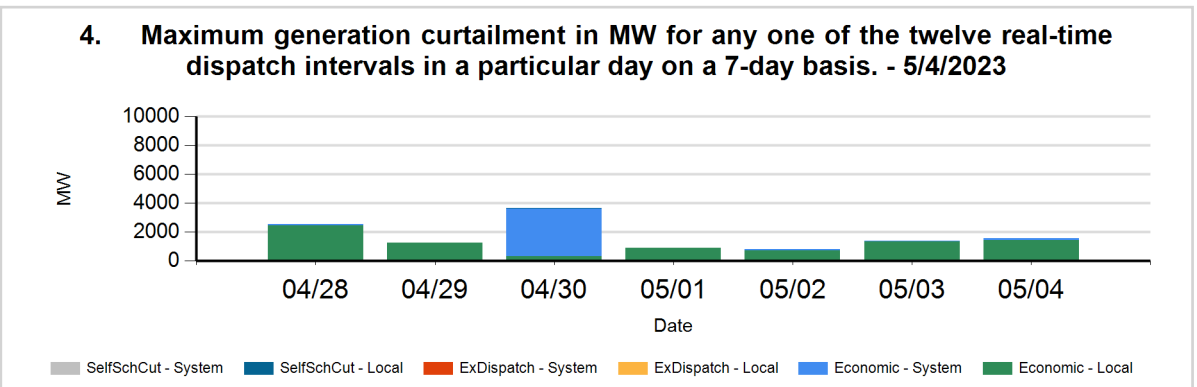
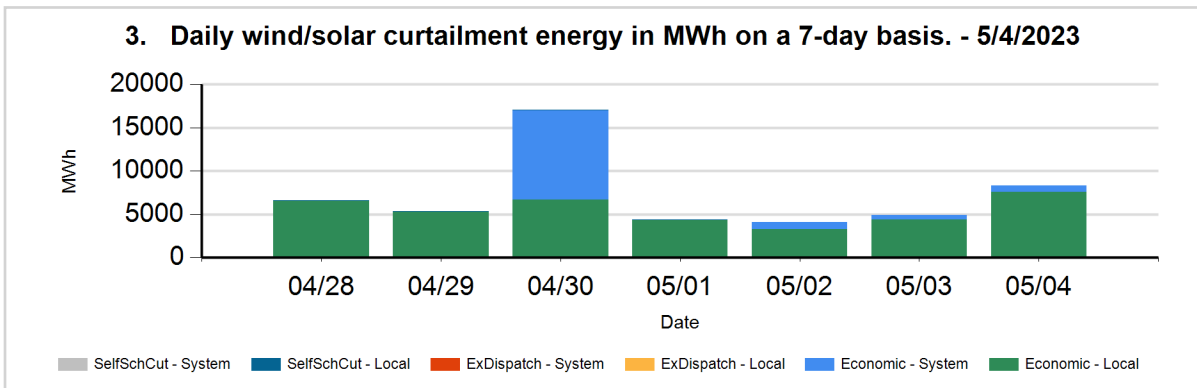
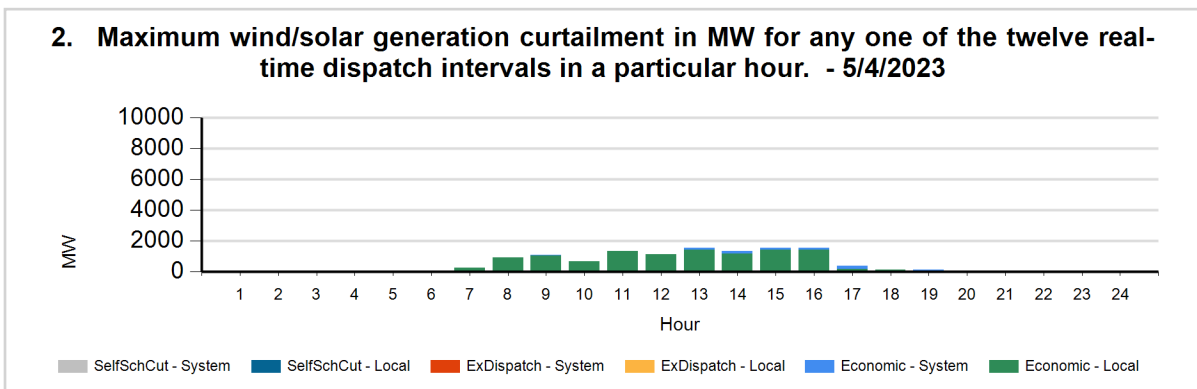
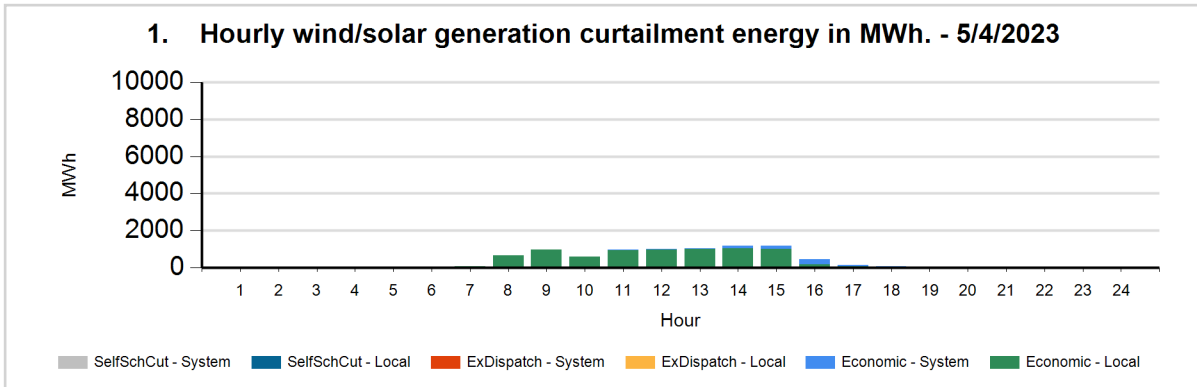
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

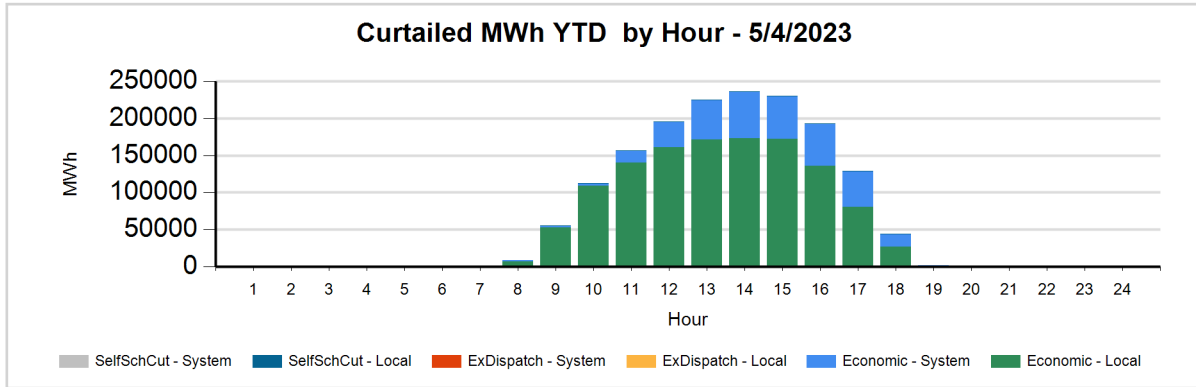
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

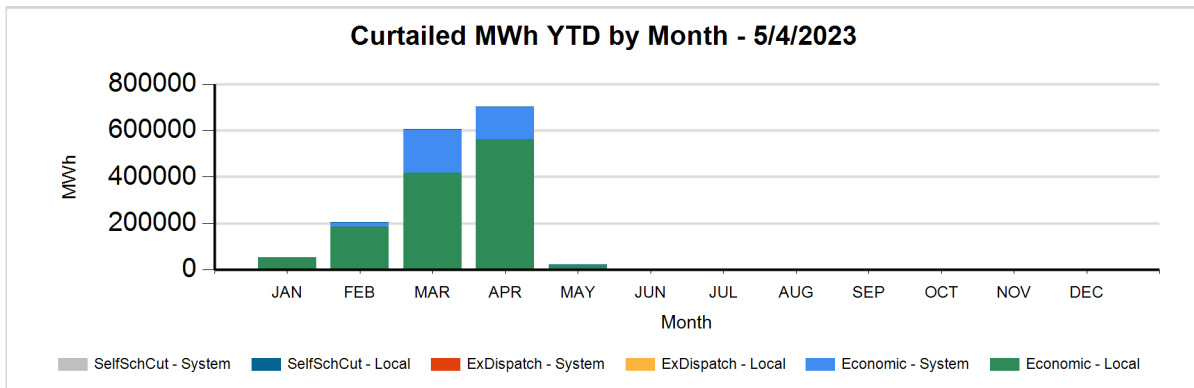
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/4/2023
LocalEconomic	1,232,143
LocalSelfSchCut	386
SystemEconomic	355,336
TOTAL	1,587,864

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/04	7	Economic	Local	SOLR	67	242
05/04	8	Economic	Local	SOLR	656	918
05/04	8	Economic	Local	WIND	7	
05/04	8	Economic	System	SOLR	0	
05/04	9	Economic	Local	SOLR	979	1071
05/04	9	Economic	System	SOLR	0	5
05/04	10	Economic	Local	SOLR	572	668
05/04	10	Economic	System	SOLR	0	
05/04	11	Economic	Local	SOLR	945	1332
05/04	11	Economic	Local	WIND	1	
05/04	11	Economic	System	SOLR	6	
05/04	12	Economic	Local	SOLR	998	1136
05/04	12	Economic	System	SOLR	12	
05/04	12	Economic	System	WIND	2	
05/04	13	Economic	Local	SOLR	991	1400
05/04	13	Economic	System	SOLR	30	87
05/04	13	Economic	System	WIND	19	72
05/04	14	Economic	Local	SOLR	1025	1166
05/04	14	Economic	Local	WIND	4	
05/04	14	Economic	System	SOLR	49	83
05/04	14	Economic	System	WIND	101	86
05/04	15	Economic	Local	SOLR	986	1408
05/04	15	Economic	Local	WIND	10	
05/04	15	Economic	System	SOLR	80	53
05/04	15	Economic	System	WIND	94	86
05/04	16	Economic	Local	SOLR	178	1410
05/04	16	Economic	System	SOLR	181	101
05/04	16	Economic	System	WIND	89	20
05/04	17	Economic	Local	SOLR	38	152
05/04	17	Economic	Local	WIND	39	
05/04	17	Economic	System	SOLR	21	134

05/04	17	Economic	System	WIND	30	92
05/04	18	Economic	Local	SOLR	6	73
05/04	18	Economic	Local	WIND	19	64
05/04	18	Economic	System	SOLR	16	
05/04	18	Economic	System	WIND	41	
05/04	19	Economic	System	SOLR	9	68
05/04	19	Economic	System	WIND	15	63

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).