

## Wind and Solar Curtailment May 05, 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.

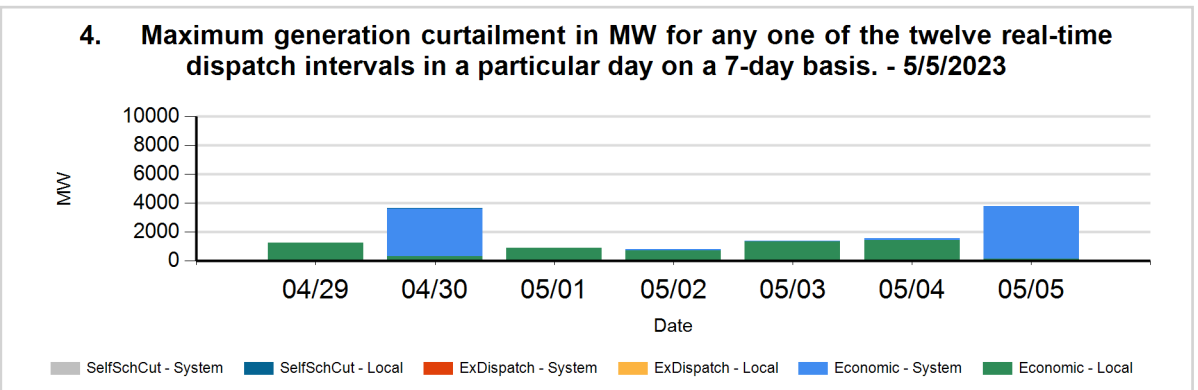
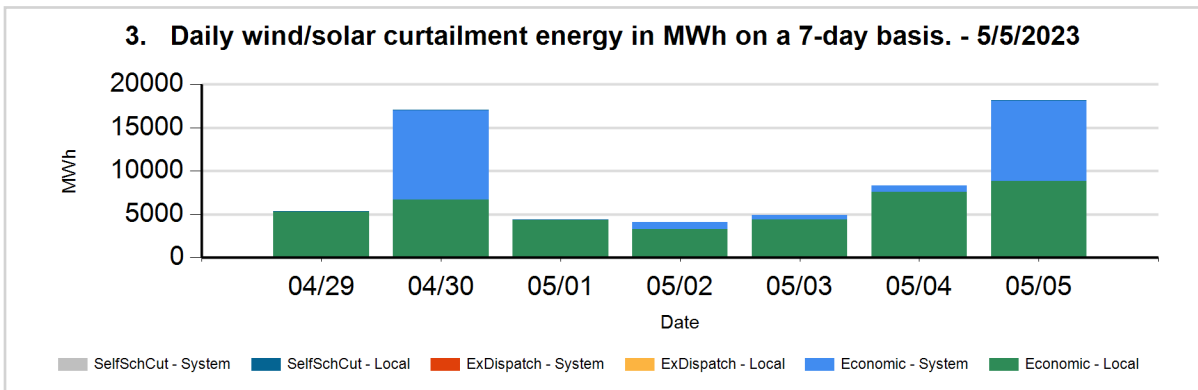
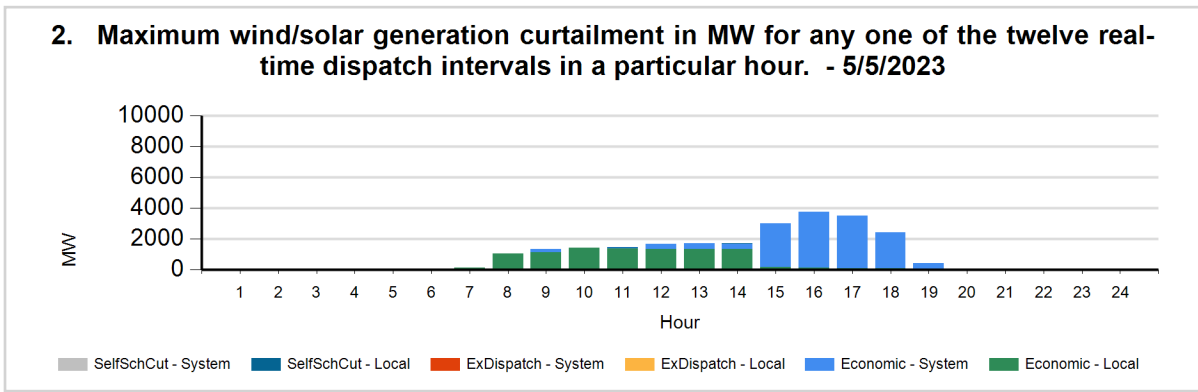
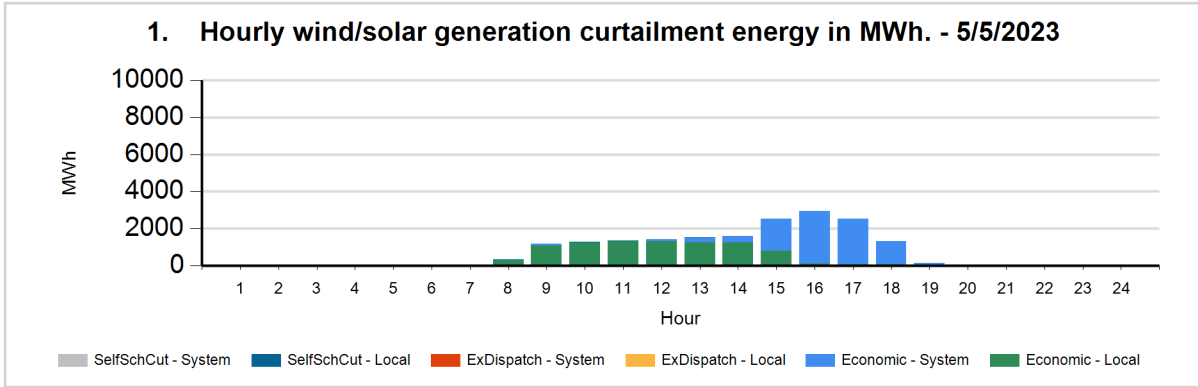
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

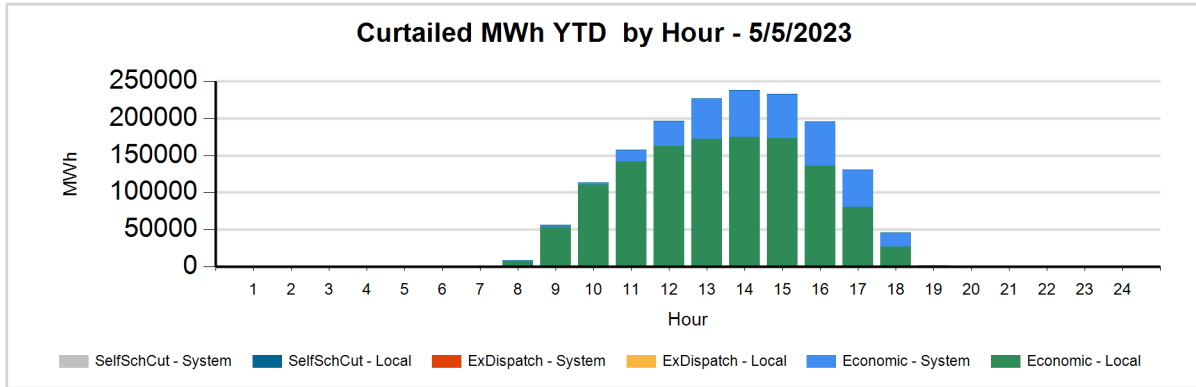
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

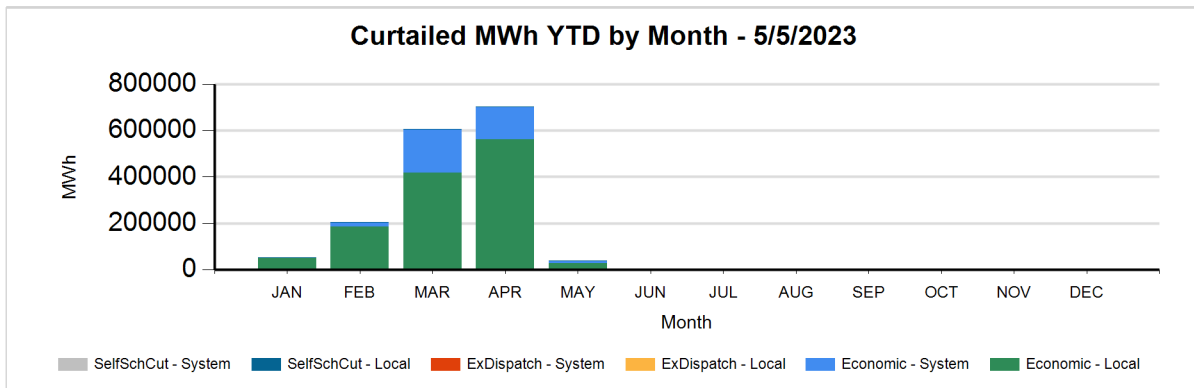
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/5/2023
LocalEconomic	1,240,995
LocalSelfSchCut	388
SystemEconomic	364,600
<b>TOTAL</b>	<b>1,605,983</b>

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/05	7	Economic	Local	SOLR	21	120
05/05	8	Economic	Local	SOLR	328	977
05/05	8	Economic	Local	WIND	7	41
05/05	8	Economic	System	SOLR	0	
05/05	8	Economic	System	WIND	13	
05/05	9	Economic	Local	SOLR	1062	1118
05/05	9	Economic	Local	WIND	10	
05/05	9	Economic	System	SOLR	24	106
05/05	9	Economic	System	WIND	79	127
05/05	10	Economic	Local	SOLR	1188	1311
05/05	10	Economic	Local	WIND	61	87
05/05	10	Economic	System	SOLR	2	
05/05	10	Economic	System	WIND	19	
05/05	10	SelfSchCut	Local	SOLR	1	
05/05	11	Economic	Local	SOLR	1296	1388
05/05	11	Economic	Local	WIND	24	
05/05	11	Economic	System	SOLR	2	
05/05	11	Economic	System	WIND	33	59
05/05	11	SelfSchCut	Local	SOLR	1	2
05/05	12	Economic	Local	SOLR	1309	1348
05/05	12	Economic	Local	WIND	17	
05/05	12	Economic	System	SOLR	38	214
05/05	12	Economic	System	WIND	46	107
05/05	12	SelfSchCut	Local	SOLR	0	
05/05	13	Economic	Local	SOLR	1211	1316
05/05	13	Economic	Local	WIND	16	
05/05	13	Economic	System	SOLR	172	196
05/05	13	Economic	System	WIND	135	181
05/05	13	SelfSchCut	Local	SOLR	1	
05/05	14	Economic	Local	SOLR	1213	1322
05/05	14	Economic	Local	WIND	18	

05/05	14	Economic	System	SOLR	181	222
05/05	14	Economic	System	WIND	169	176
05/05	14	SelfSchCut	Local	SOLR	0	2
05/05	15	Economic	Local	SOLR	775	144
05/05	15	Economic	Local	WIND	20	
05/05	15	Economic	System	SOLR	1517	2666
05/05	15	Economic	System	WIND	211	200
05/05	15	SelfSchCut	Local	SOLR	0	
05/05	16	Economic	Local	SOLR	113	117
05/05	16	Economic	System	SOLR	2624	3454
05/05	16	Economic	System	WIND	205	186
05/05	17	Economic	Local	SOLR	69	74
05/05	17	Economic	System	SOLR	2232	3236
05/05	17	Economic	System	WIND	213	191
05/05	18	Economic	Local	SOLR	65	81
05/05	18	Economic	System	SOLR	986	2072
05/05	18	Economic	System	WIND	255	258
05/05	19	Economic	Local	SOLR	16	44
05/05	19	Economic	Local	WIND	14	
05/05	19	Economic	System	SOLR	29	134
05/05	19	Economic	System	WIND	78	235

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).