

## Wind and Solar Curtailment May 01, 2019

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.

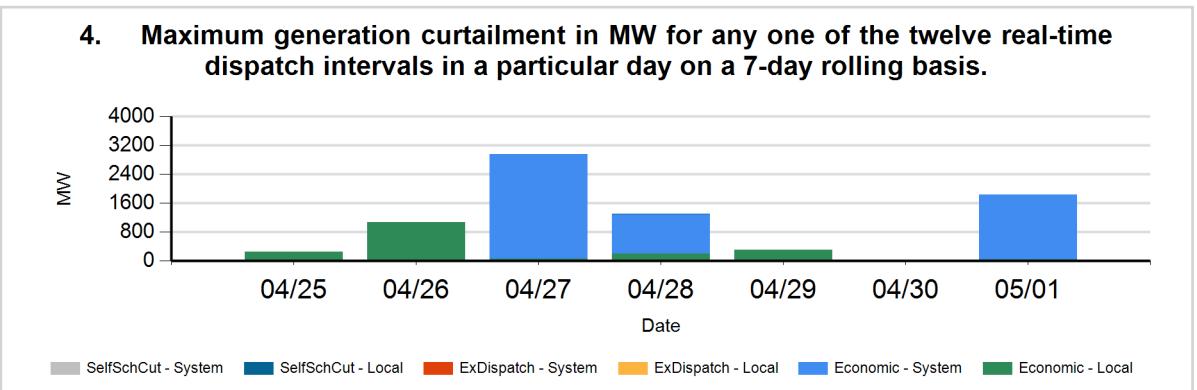
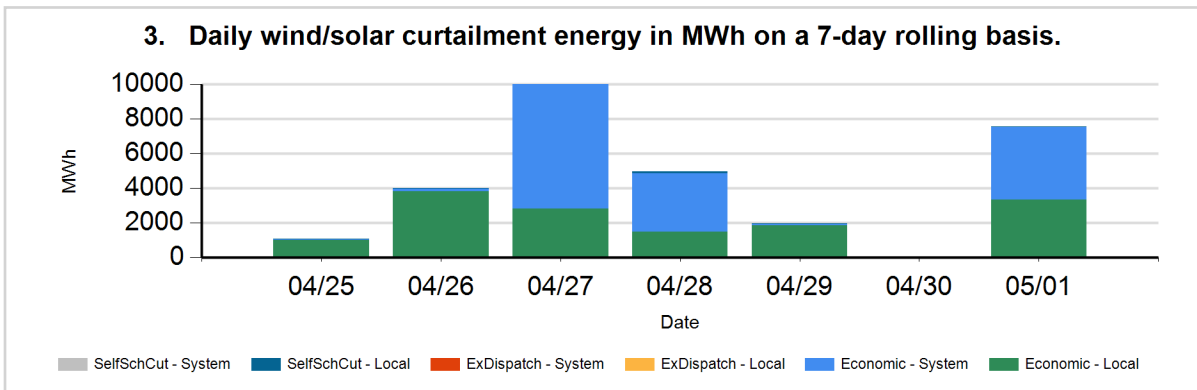
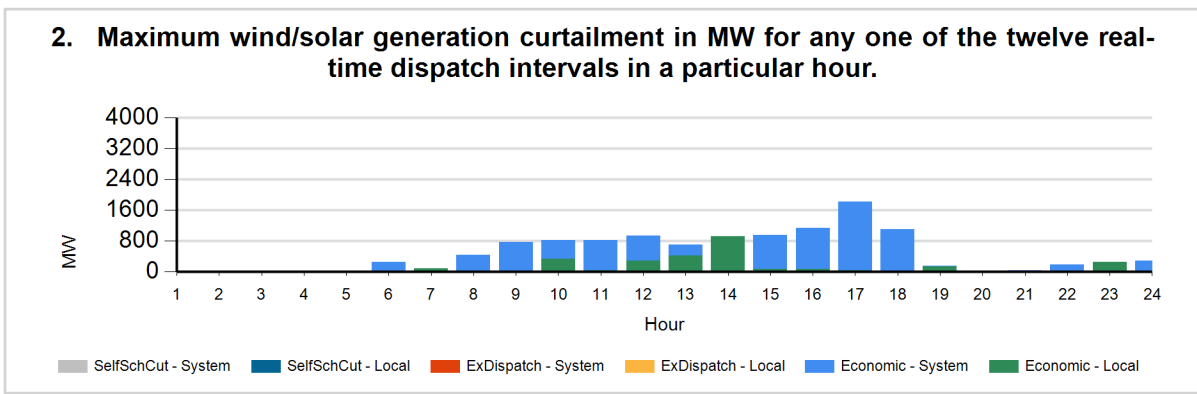
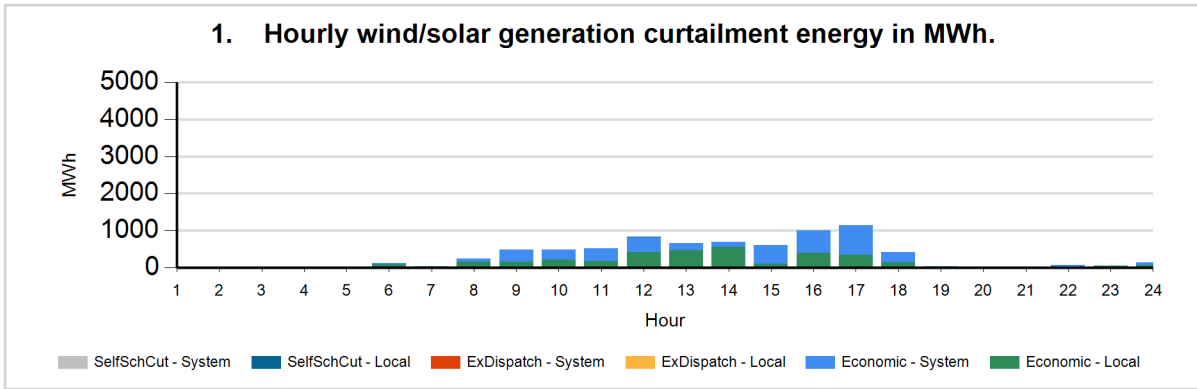
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

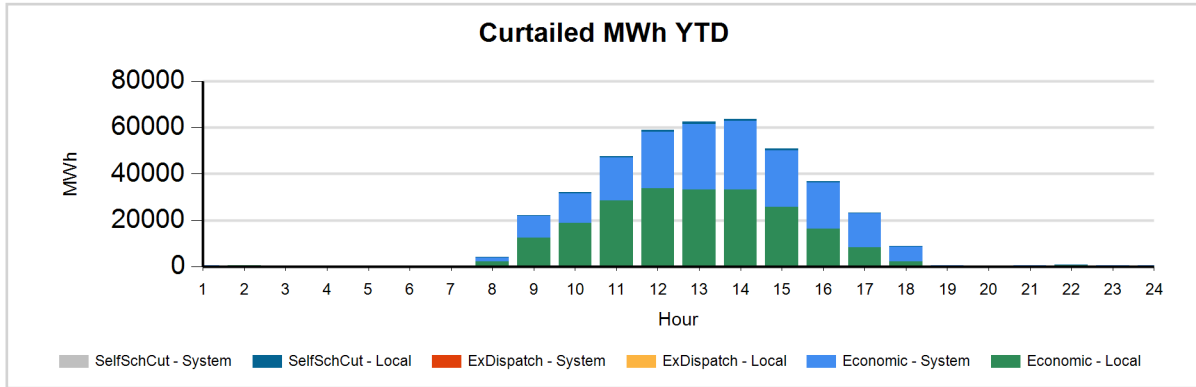
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

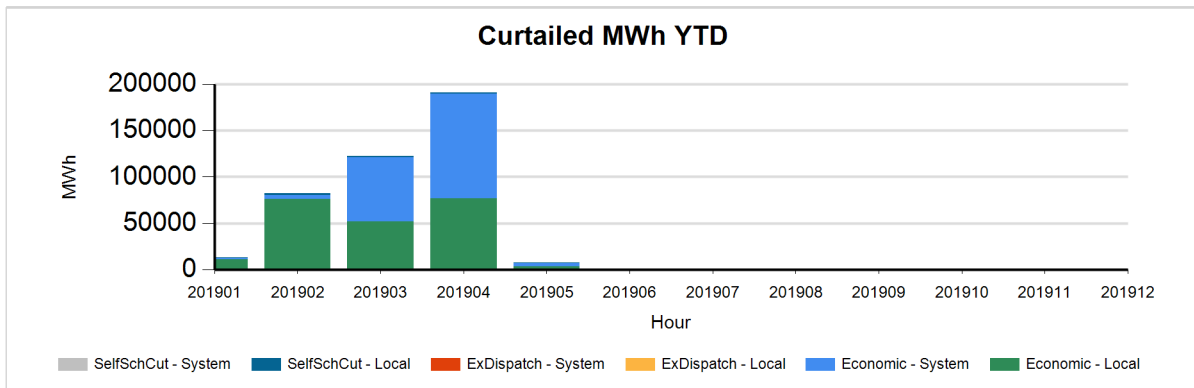
The following charts show the daily and 7-day rolling wind and solar curtailment by category, if any.



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
LocalEconomic	218,867
LocalSelfSchCut	5,432
SystemEconomic	191,528
TOTAL	415,827

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/01	6	Economic	System	WIND	43	246
05/01	7	Economic	Local	SOLR	3	33
05/01	7	Economic	Local	WIND	4	47
05/01	8	Economic	Local	SOLR	110	2
05/01	8	Economic	System	SOLR	52	316
05/01	8	Economic	System	WIND	28	115
05/01	9	Economic	Local	SOLR	115	1
05/01	9	Economic	System	SOLR	280	662
05/01	9	Economic	System	WIND	65	97
05/01	10	Economic	Local	SOLR	201	325
05/01	10	Economic	System	SOLR	282	497
05/01	11	Economic	Local	SOLR	173	33
05/01	11	Economic	System	SOLR	340	783
05/01	11	Economic	System	WIND	1	1
05/01	12	Economic	Local	SOLR	411	286
05/01	12	Economic	System	SOLR	415	652
05/01	13	Economic	Local	SOLR	461	423
05/01	13	Economic	System	SOLR	192	270
05/01	14	Economic	Local	SOLR	551	920
05/01	15	Economic	Local	SOLR	96	64
05/01	15	Economic	System	SOLR	514	885
05/01	15	Economic	System	WIND	1	2
05/01	16	Economic	Local	SOLR	389	65
05/01	16	Economic	System	SOLR	610	1072
05/01	17	Economic	Local	SOLR	346	31
05/01	17	Economic	System	SOLR	792	1757
05/01	17	Economic	System	WIND	3	37
05/01	18	Economic	Local	SOLR	126	22
05/01	18	Economic	System	SOLR	280	1072
05/01	18	Economic	System	WIND	7	13
05/01	19	Economic	Local	SOLR	22	137

05/01	19	Economic	System	WIND	3	14
05/01	20	Economic	System	WIND	7	17
05/01	21	Economic	System	WIND	17	33
05/01	22	Economic	System	WIND	52	177
05/01	23	Economic	Local	WIND	57	248
05/01	24	Economic	System	WIND	80	287

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).