

## Wind and Solar Curtailment May 16, 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.

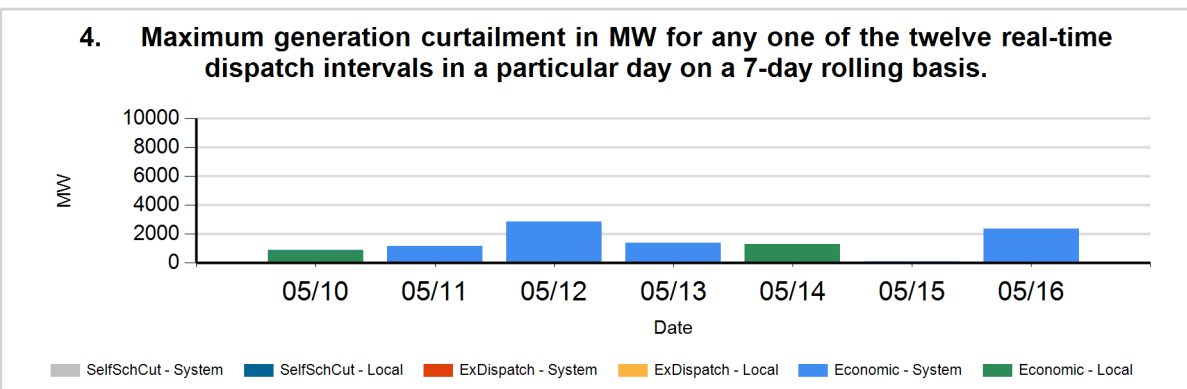
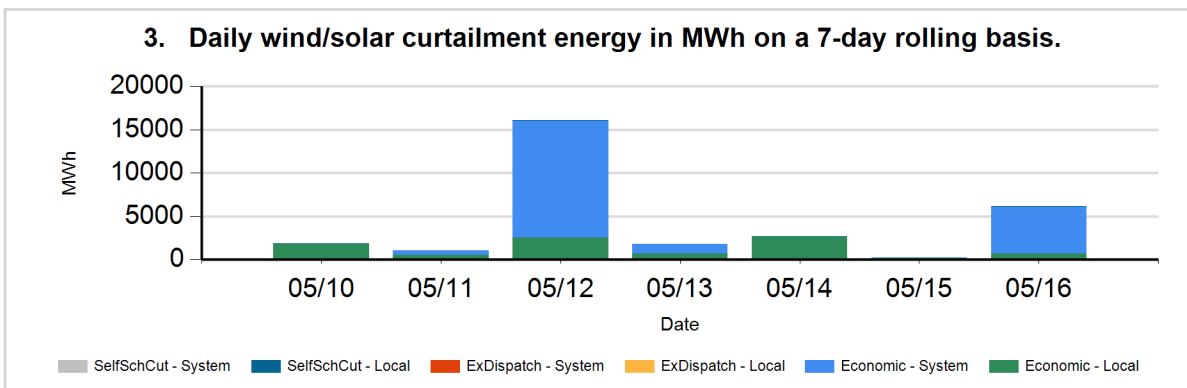
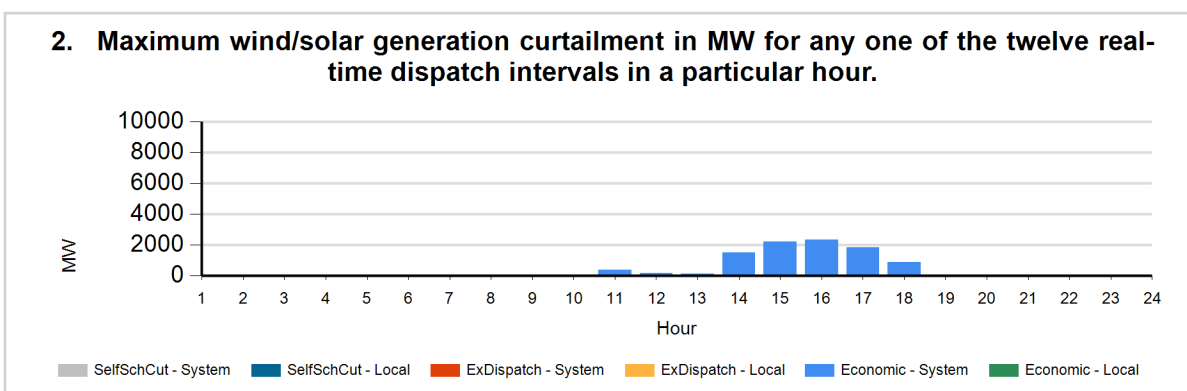
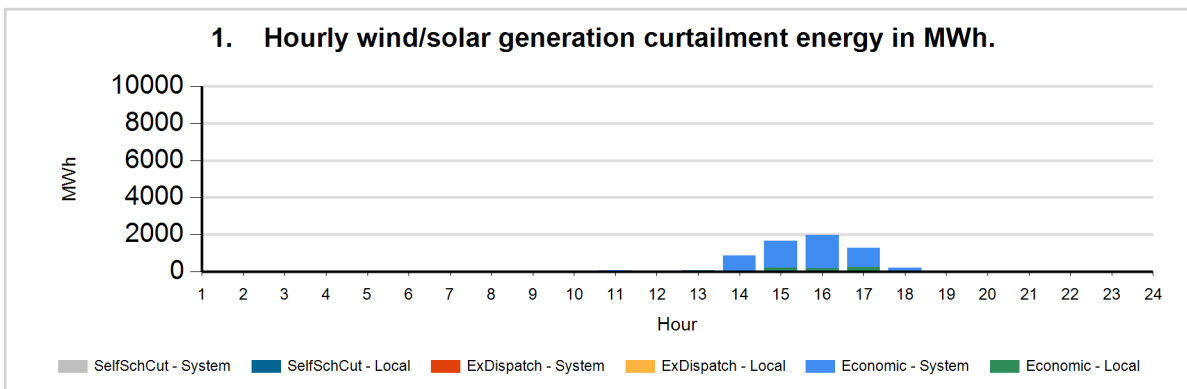
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

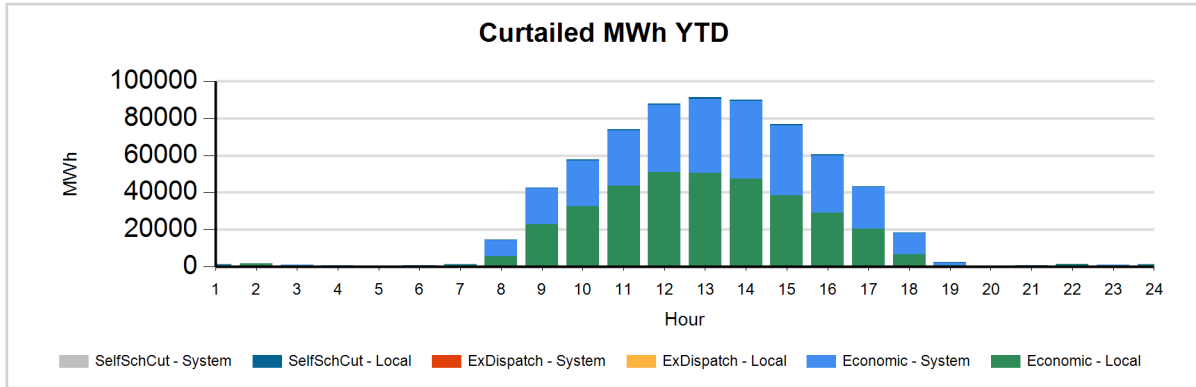
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

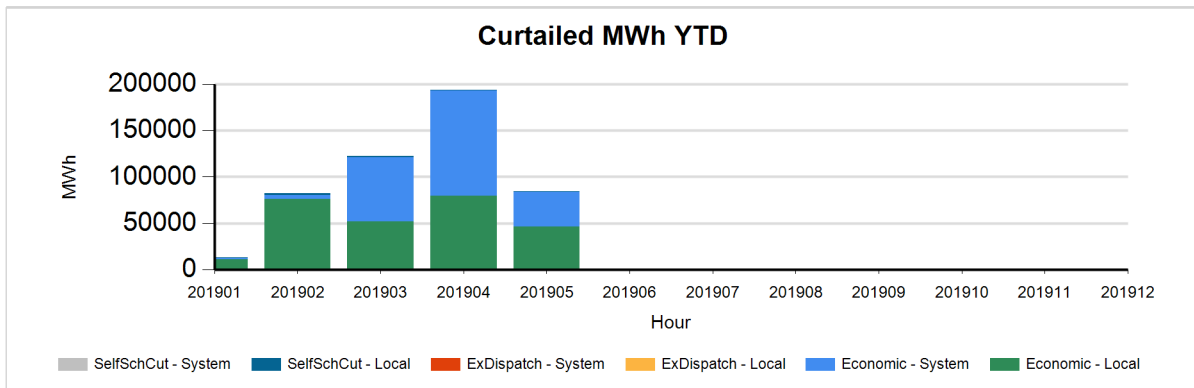
The following charts show the daily and 7-day rolling wind and solar curtailment by category, if any.



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	264,886
LocalSelfSchCut	5,534
SystemEconomic	225,867
TOTAL	496,287

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/16	8	Economic	System	SOLR	2	11
05/16	9	Economic	Local	SOLR	7	18
05/16	10	Economic	Local	SOLR	9	14
05/16	10	Economic	System	SOLR	8	6
05/16	11	Economic	Local	SOLR	17	16
05/16	11	Economic	System	SOLR	34	315
05/16	11	Economic	System	WIND	2	23
05/16	12	Economic	Local	SOLR	13	11
05/16	12	Economic	System	SOLR	18	116
05/16	12	Economic	System	WIND	7	21
05/16	13	Economic	Local	SOLR	47	33
05/16	13	Economic	System	SOLR	20	66
05/16	13	Economic	System	WIND	4	39
05/16	14	Economic	Local	SOLR	4	9
05/16	14	Economic	System	SOLR	812	1460
05/16	14	Economic	System	WIND	44	48
05/16	15	Economic	Local	SOLR	184	8
05/16	15	Economic	System	SOLR	1425	2091
05/16	15	Economic	System	WIND	52	93
05/16	16	Economic	Local	SOLR	166	8
05/16	16	Economic	System	SOLR	1729	2226
05/16	16	Economic	System	WIND	53	95
05/16	17	Economic	Local	SOLR	215	20
05/16	17	Economic	System	SOLR	1020	1729
05/16	17	Economic	System	WIND	41	94
05/16	18	Economic	Local	SOLR	9	9
05/16	18	Economic	System	SOLR	166	832
05/16	18	Economic	System	WIND	16	43
05/16	19	Economic	System	SOLR	0	3

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).

