

Wind and Solar Curtailment May 17, 2019

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why¹. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation².

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion³.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply⁴.
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.

¹Only 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.

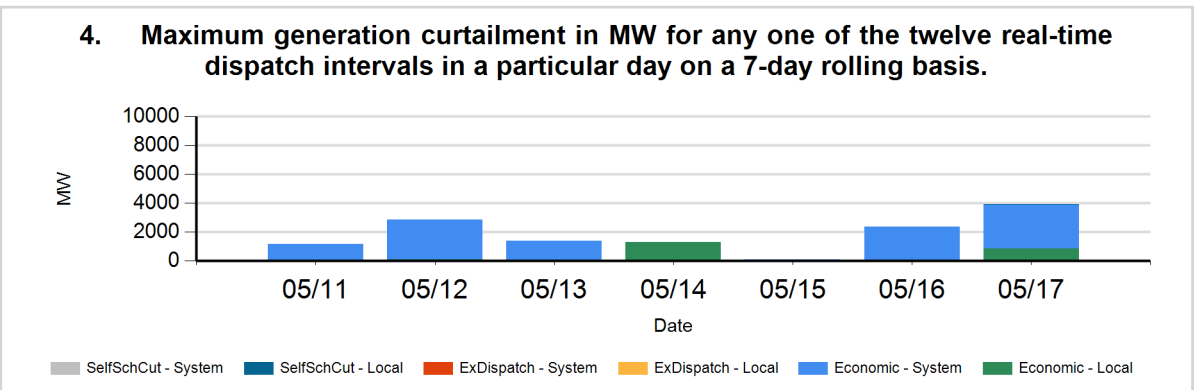
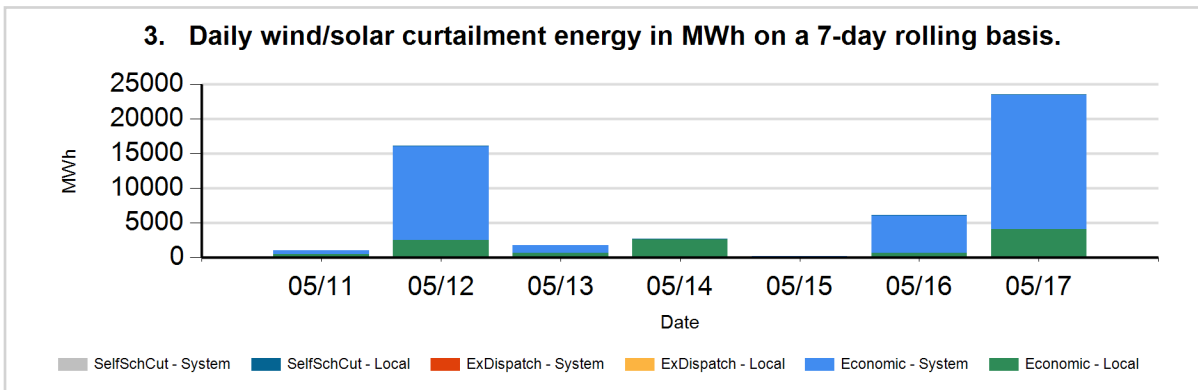
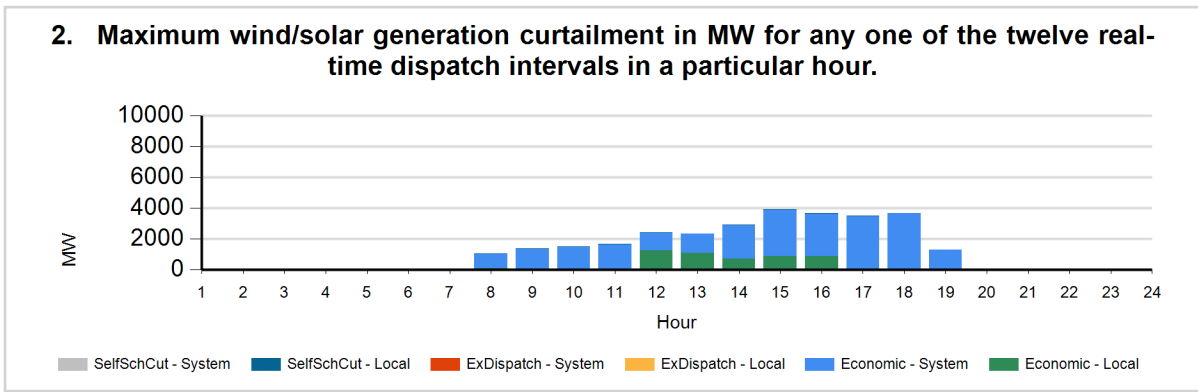
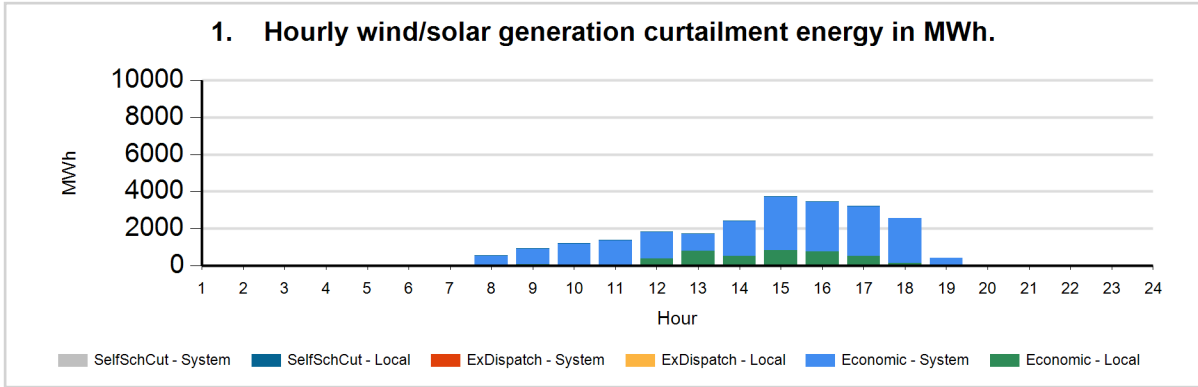
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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

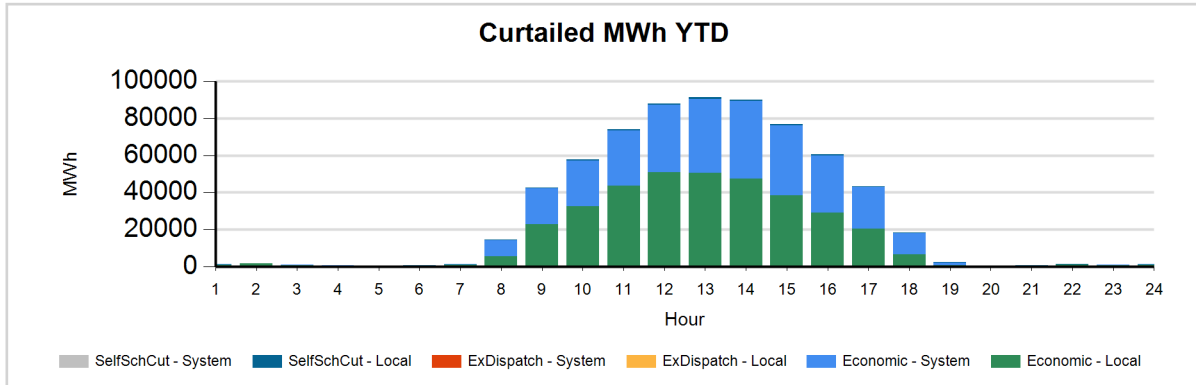
⁴For more information on oversupply conditions, please see:

https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

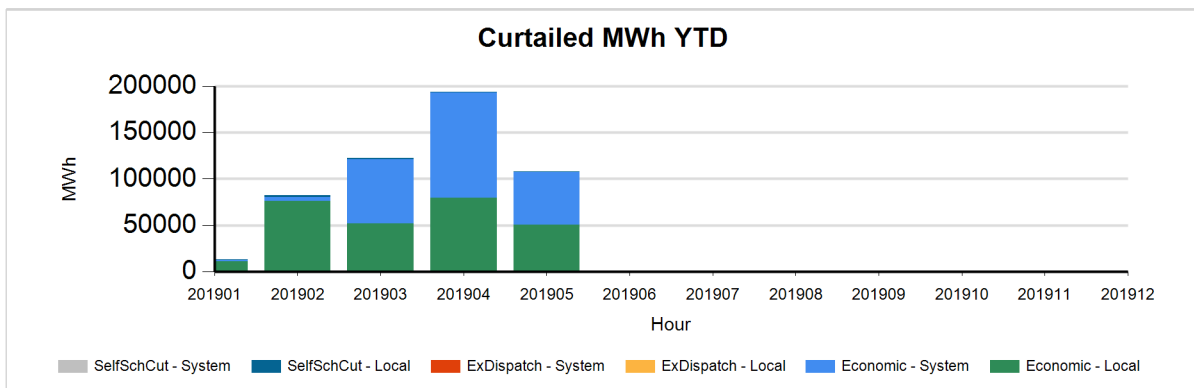
The following charts show the daily and 7-day rolling wind and solar curtailment by category, if any.



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	268,966
LocalSelfSchCut	5,608
SystemEconomic	245,208
TOTAL	519,783

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/17	8	Economic	Local	SOLR	6	62
05/17	8	Economic	System	SOLR	518	931
05/17	8	Economic	System	WIND	41	48
05/17	8	SelfSchCut	Local	SOLR	1	9
05/17	9	Economic	Local	SOLR	64	19
05/17	9	Economic	System	SOLR	830	1284
05/17	9	Economic	System	WIND	41	45
05/17	9	SelfSchCut	Local	SOLR	8	15
05/17	10	Economic	Local	SOLR	16	19
05/17	10	Economic	System	SOLR	1128	1417
05/17	10	Economic	System	WIND	46	43
05/17	10	SelfSchCut	Local	SOLR	12	2
05/17	11	Economic	System	SOLR	1305	1633
05/17	11	Economic	System	WIND	42	39
05/17	11	SelfSchCut	Local	SOLR	6	10
05/17	12	Economic	Local	SOLR	384	1220
05/17	12	Economic	Local	WIND	5	10
05/17	12	Economic	System	SOLR	1385	1121
05/17	12	Economic	System	WIND	48	66
05/17	12	SelfSchCut	Local	SOLR	9	11
05/17	13	Economic	Local	SOLR	794	1064
05/17	13	Economic	Local	WIND	15	9
05/17	13	Economic	System	SOLR	903	1227
05/17	13	Economic	System	WIND	24	25
05/17	14	Economic	Local	SOLR	513	697
05/17	14	Economic	Local	WIND	2	1
05/17	14	Economic	System	SOLR	1838	2087
05/17	14	Economic	System	WIND	77	131
05/17	14	SelfSchCut	Local	SOLR	6	8
05/17	15	Economic	Local	SOLR	814	832
05/17	15	Economic	Local	WIND	20	22

05/17	15	Economic	System	SOLR	2595	2732
05/17	15	Economic	System	WIND	292	328
05/17	15	SelfSchCut	Local	SOLR	9	8
05/17	16	Economic	Local	SOLR	739	832
05/17	16	Economic	Local	WIND	10	22
05/17	16	Economic	System	SOLR	2476	2559
05/17	16	Economic	System	WIND	229	251
05/17	16	SelfSchCut	Local	SOLR	9	7
05/17	17	Economic	Local	SOLR	507	4
05/17	17	Economic	System	SOLR	2488	3183
05/17	17	Economic	System	WIND	183	314
05/17	17	SelfSchCut	Local	SOLR	12	7
05/17	18	Economic	Local	SOLR	125	53
05/17	18	Economic	System	SOLR	2185	3038
05/17	18	Economic	System	WIND	252	556
05/17	19	Economic	System	SOLR	395	1250
05/17	19	Economic	System	WIND	18	37

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.