

Wind and Solar Curtailment May 27, 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.

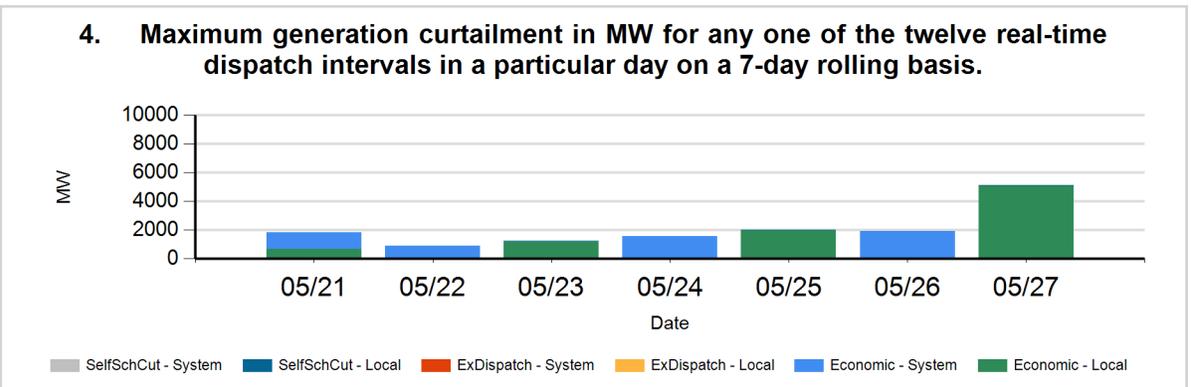
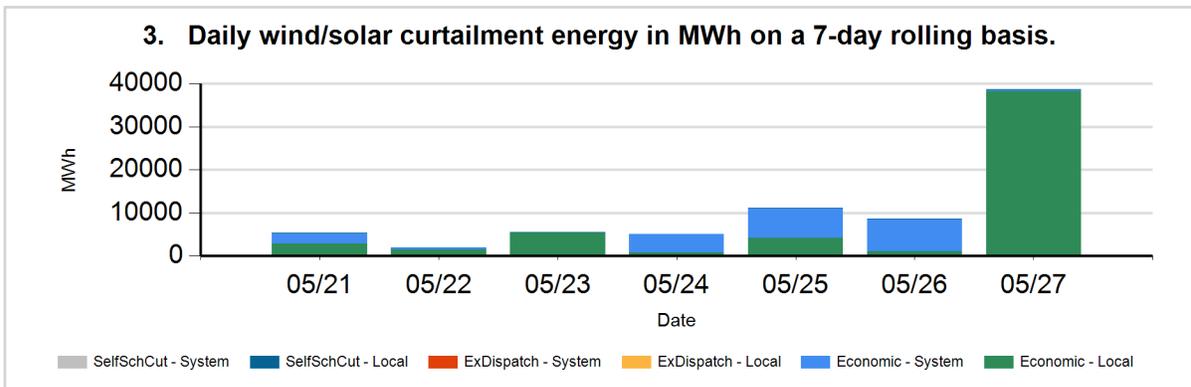
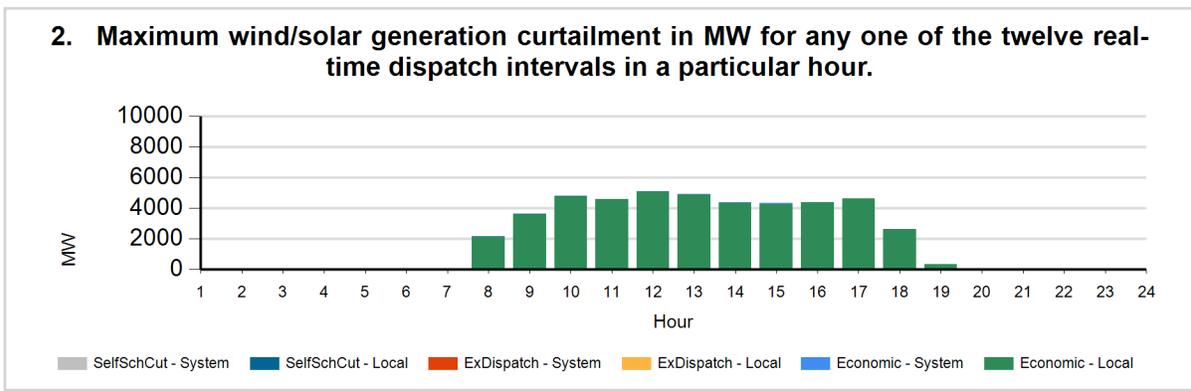
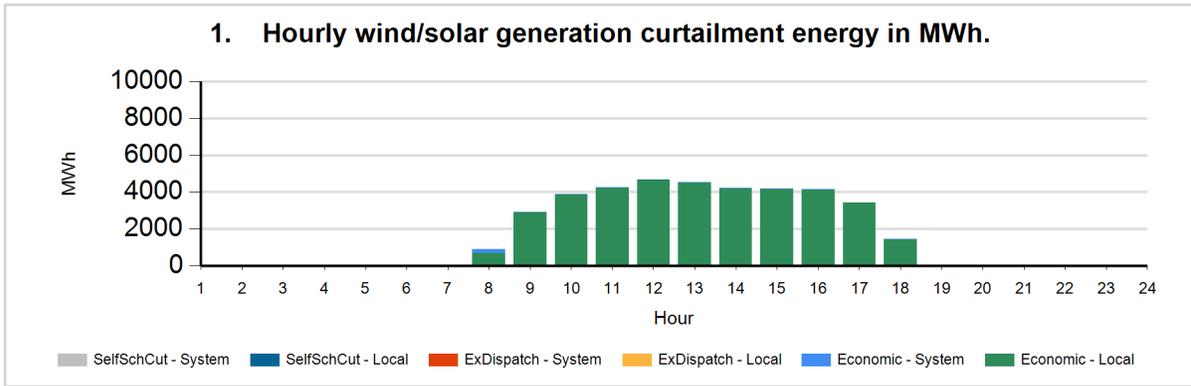
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

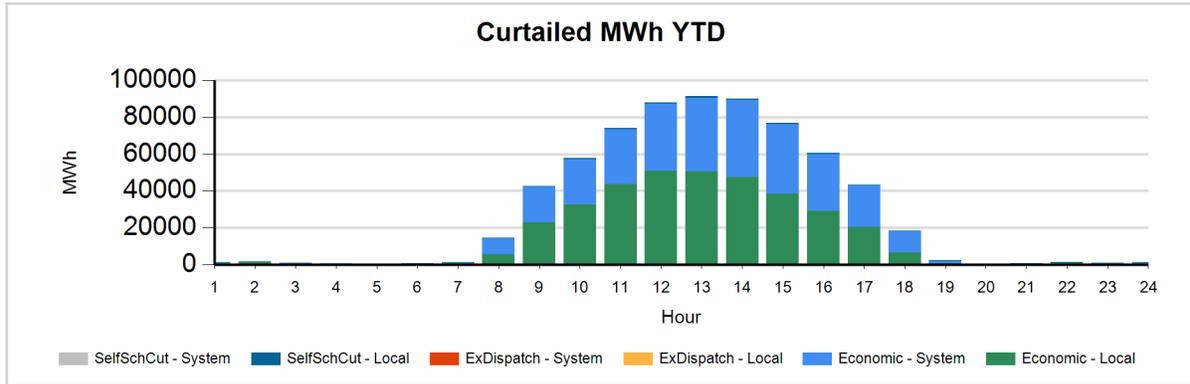
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

⁴For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

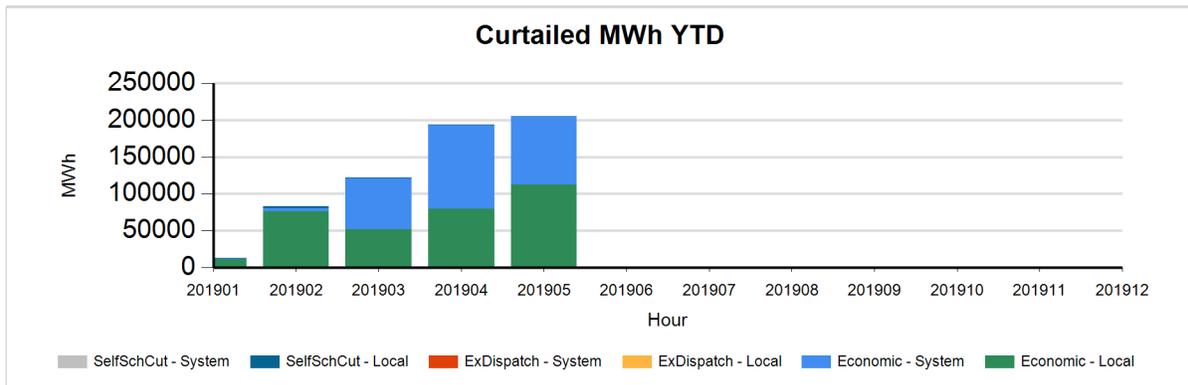
The following charts show the daily and 7-day rolling wind and solar curtailment by category, if any.



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	330,336
LocalSelfSchCut	5,698
SystemEconomic	280,509
TOTAL	616,543

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/27	8	Economic	Local	SOLR	683	2077
05/27	8	Economic	Local	WIND	14	51
05/27	8	Economic	System	WIND	3	22
05/27	9	Economic	Local	SOLR	2854	3552
05/27	9	Economic	Local	WIND	53	50
05/27	9	SelfSchCut	Local	SOLR	2	8
05/27	10	Economic	Local	SOLR	3783	4614
05/27	10	Economic	Local	WIND	94	182
05/27	10	SelfSchCut	Local	SOLR	7	2
05/27	11	Economic	Local	SOLR	4067	4419
05/27	11	Economic	Local	WIND	156	177
05/27	12	Economic	Local	SOLR	4369	4661
05/27	12	Economic	Local	WIND	284	420
05/27	12	Economic	System	SOLR	15	15
05/27	12	SelfSchCut	Local	SOLR	2	2
05/27	13	Economic	Local	SOLR	4330	4662
05/27	13	Economic	Local	WIND	191	210
05/27	13	Economic	System	SOLR	14	31
05/27	14	Economic	Local	SOLR	4046	4187
05/27	14	Economic	Local	WIND	174	175
05/27	14	Economic	System	SOLR	11	7
05/27	15	Economic	Local	SOLR	3985	4081
05/27	15	Economic	Local	WIND	179	180
05/27	15	Economic	System	SOLR	14	53
05/27	16	Economic	Local	SOLR	3950	4187
05/27	16	Economic	Local	WIND	184	184
05/27	17	Economic	Local	SOLR	3231	4185
05/27	17	Economic	Local	WIND	179	449
05/27	18	Economic	Local	SOLR	1398	2484
05/27	18	Economic	Local	WIND	39	136
05/27	19	Economic	Local	SOLR	44	316

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.