

Wind and Solar Curtailment May 25, 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.

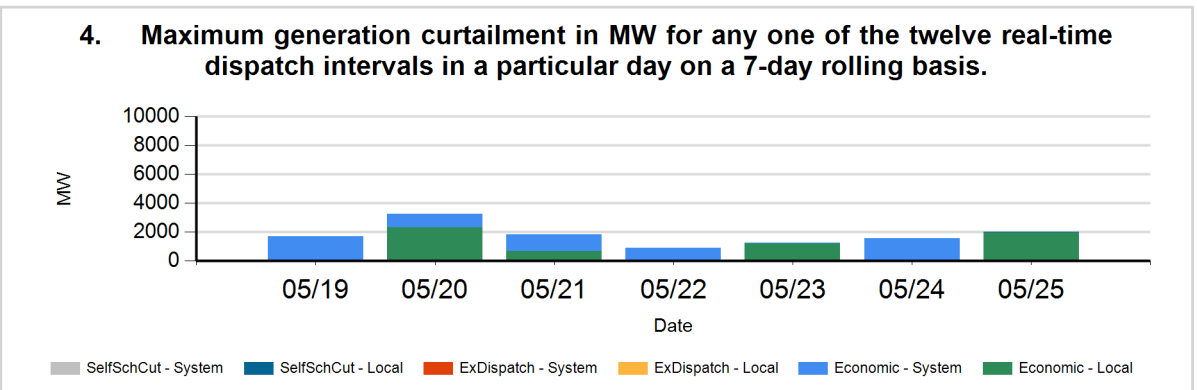
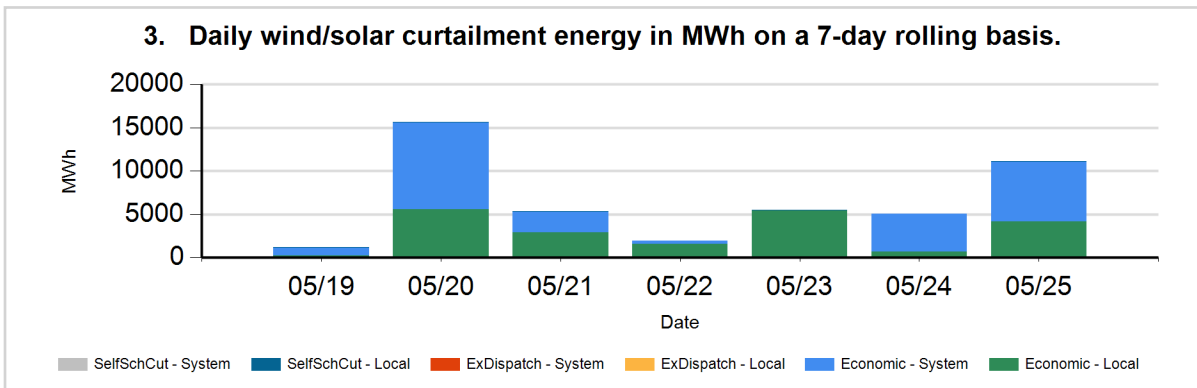
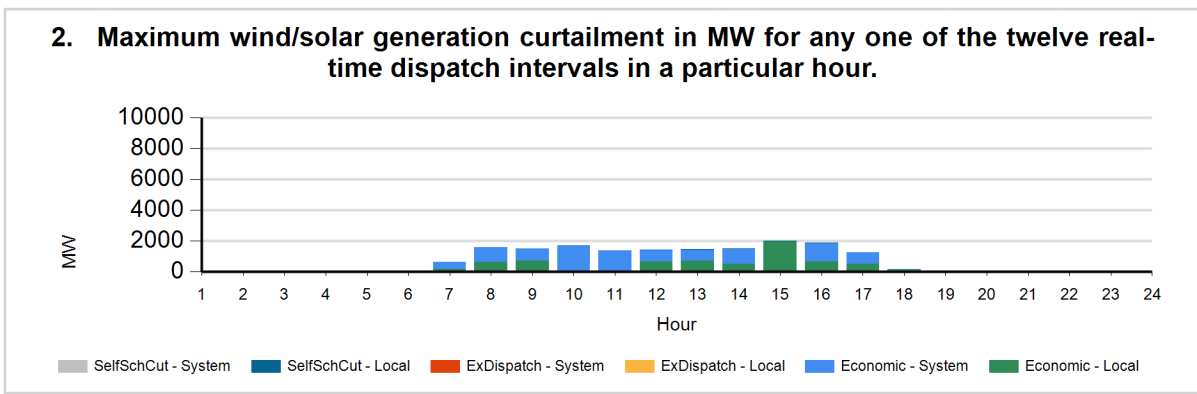
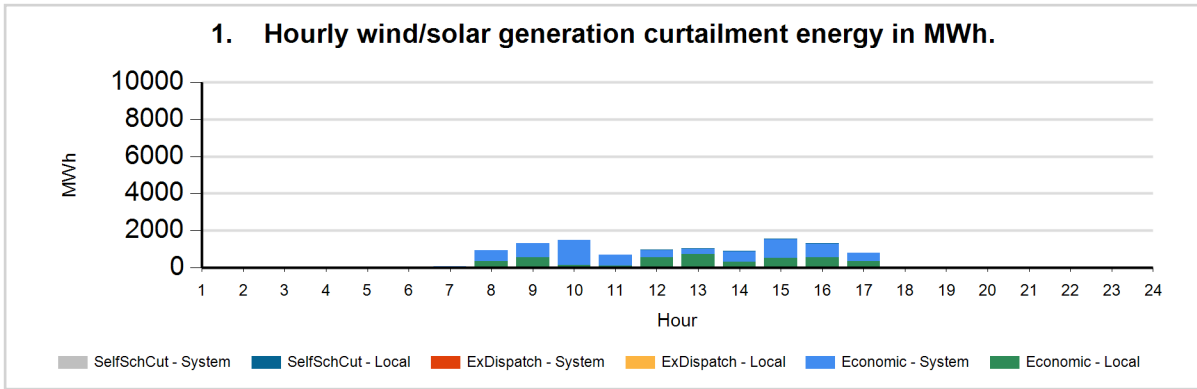
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

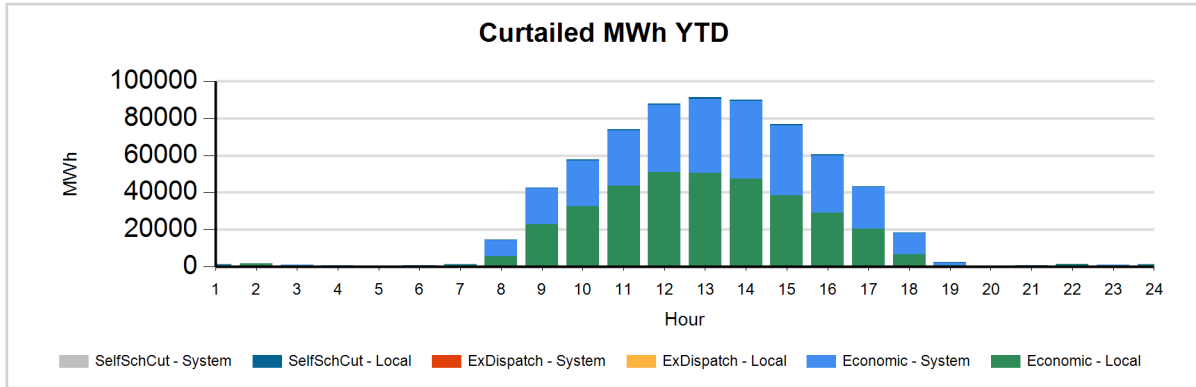
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

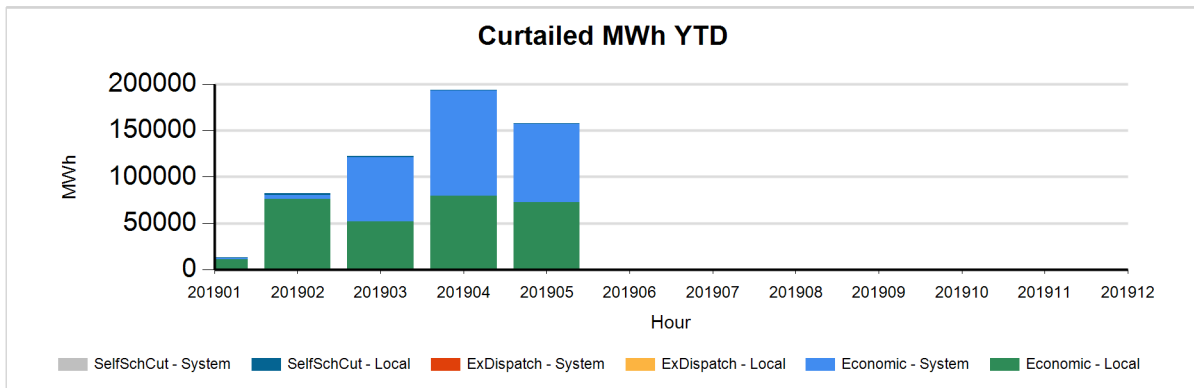
The following charts show the daily and 7-day rolling wind and solar curtailment by category, if any.



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	291,073
LocalSelfSchCut	5,684
SystemEconomic	272,561
TOTAL	569,318

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/25	7	Economic	Local	SOLR	15	176
05/25	7	Economic	System	SOLR	48	429
05/25	7	Economic	System	WIND	0	3
05/25	8	Economic	Local	SOLR	345	614
05/25	8	Economic	System	SOLR	534	929
05/25	8	Economic	System	WIND	33	35
05/25	9	Economic	Local	SOLR	563	693
05/25	9	Economic	System	SOLR	725	781
05/25	9	Economic	System	WIND	33	31
05/25	10	Economic	Local	SOLR	125	31
05/25	10	Economic	System	SOLR	1336	1666
05/25	10	Economic	System	WIND	26	27
05/25	11	Economic	Local	SOLR	96	36
05/25	11	Economic	System	SOLR	582	1315
05/25	11	Economic	System	WIND	23	26
05/25	12	Economic	Local	SOLR	530	679
05/25	12	Economic	System	SOLR	412	713
05/25	12	Economic	System	WIND	13	5
05/25	12	SelfSchCut	Local	SOLR	1	2
05/25	13	Economic	Local	SOLR	701	703
05/25	13	Economic	Local	WIND	6	4
05/25	13	Economic	System	SOLR	318	750
05/25	13	Economic	System	WIND	6	6
05/25	13	SelfSchCut	Local	SOLR	4	2
05/25	14	Economic	Local	SOLR	297	504
05/25	14	Economic	System	SOLR	571	969
05/25	14	Economic	System	WIND	7	8
05/25	14	SelfSchCut	Local	SOLR	11	11
05/25	15	Economic	Local	SOLR	521	1975
05/25	15	Economic	Local	WIND	2	12
05/25	15	SelfSchCut	Local	SOLR	8	5

05/25	16	Economic	Local	SOLR	523	635
05/25	16	Economic	Local	WIND	14	18
05/25	16	Economic	System	SOLR	766	1194
05/25	16	Economic	System	WIND	14	14
05/25	16	SelfSchCut	Local	SOLR	3	5
05/25	17	Economic	Local	SOLR	322	485
05/25	17	Economic	Local	WIND	6	19
05/25	17	Economic	System	SOLR	435	723
05/25	17	Economic	System	WIND	14	20
05/25	18	Economic	Local	SOLR	35	132
05/25	18	Economic	Local	WIND	2	2
05/25	18	Economic	System	SOLR	10	11
05/25	19	Economic	Local	SOLR	1	12

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.