

Wind and Solar Curtailment May 20, 2020

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.

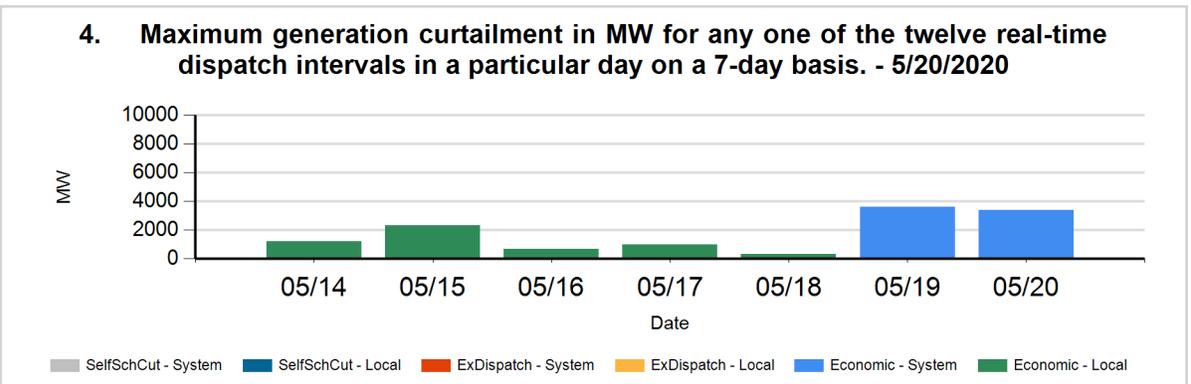
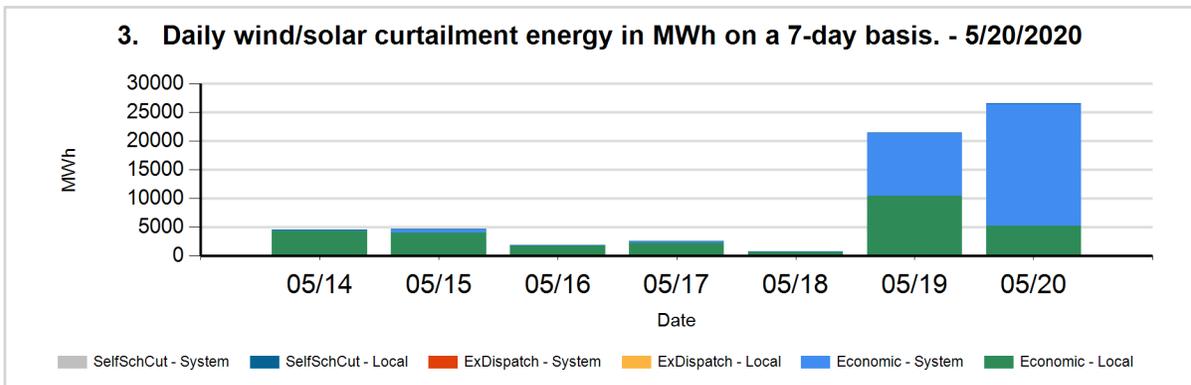
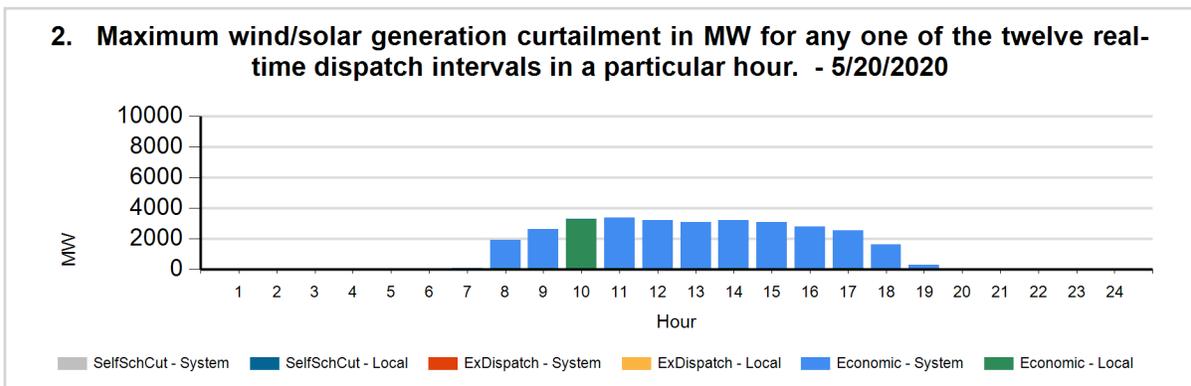
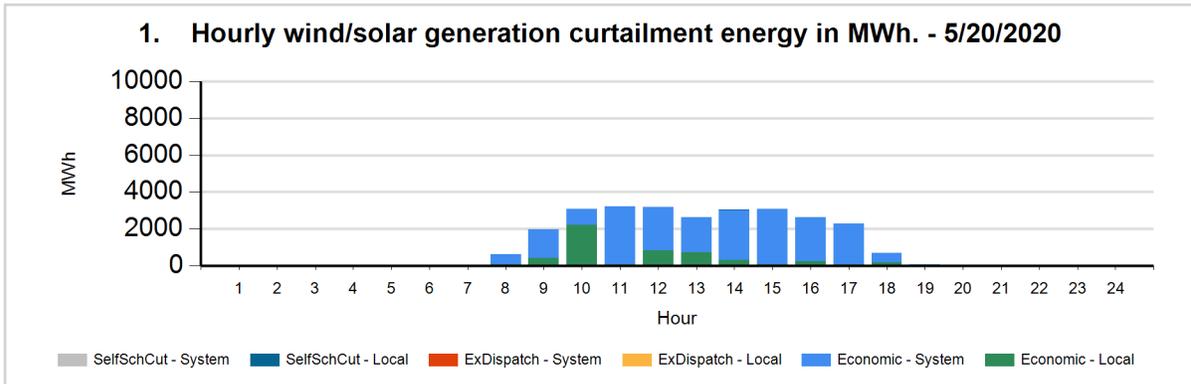
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

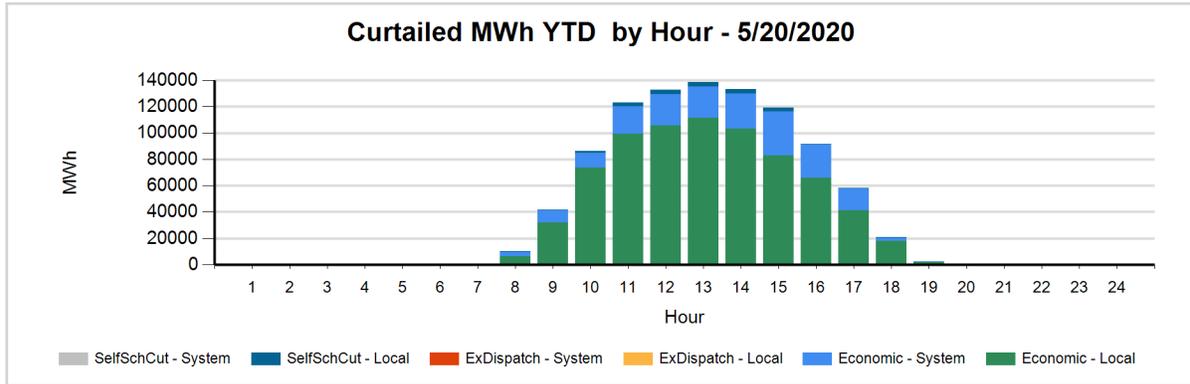
⁴For more information on oversupply conditions, please see:

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

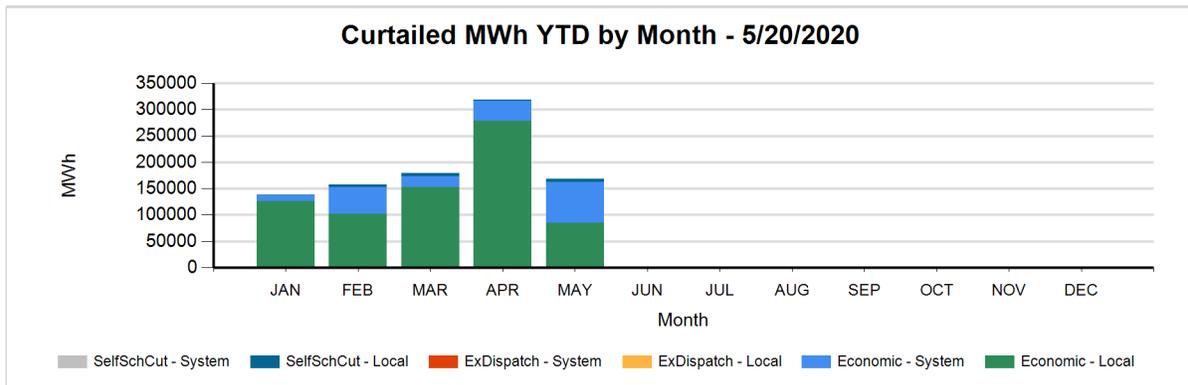
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/20/2020
LocalEconomic	744,658
LocalSelfSchCut	19,473
SystemEconomic	196,441
TOTAL	960,571

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/20	3	Economic	System	WIND	2	22
05/20	6	Economic	System	SOLR	1	9
05/20	7	Economic	Local	SOLR	16	27
05/20	7	Economic	System	SOLR	8	34
05/20	8	Economic	Local	SOLR	65	67
05/20	8	Economic	Local	WIND	4	
05/20	8	Economic	System	SOLR	543	1806
05/20	8	Economic	System	WIND	24	52
05/20	9	Economic	Local	SOLR	392	65
05/20	9	Economic	Local	WIND	8	
05/20	9	Economic	System	SOLR	1534	2512
05/20	9	Economic	System	WIND	43	47
05/20	10	Economic	Local	SOLR	2207	3244
05/20	10	Economic	Local	WIND	16	33
05/20	10	Economic	System	SOLR	844	13
05/20	10	Economic	System	WIND	23	
05/20	10	SelfSchCut	Local	SOLR	0	1
05/20	11	Economic	Local	SOLR	53	60
05/20	11	Economic	System	SOLR	3146	3277
05/20	11	Economic	System	WIND	30	27
05/20	12	Economic	Local	SOLR	831	57
05/20	12	Economic	Local	WIND	6	
05/20	12	Economic	System	SOLR	2329	3109
05/20	12	Economic	System	WIND	17	24
05/20	13	Economic	Local	SOLR	734	55
05/20	13	Economic	Local	WIND	4	
05/20	13	Economic	System	SOLR	1878	3024
05/20	13	Economic	System	WIND	13	19
05/20	14	Economic	Local	SOLR	309	65
05/20	14	Economic	Local	WIND	1	
05/20	14	Economic	System	SOLR	2707	3114

05/20	14	Economic	System	WIND	15	15
05/20	14	SelfSchCut	Local	SOLR	1	
05/20	15	Economic	Local	SOLR	57	57
05/20	15	Economic	System	SOLR	2995	3023
05/20	15	Economic	System	WIND	16	17
05/20	16	Economic	Local	SOLR	240	56
05/20	16	Economic	Local	WIND	2	
05/20	16	Economic	System	SOLR	2360	2702
05/20	16	Economic	System	WIND	23	27
05/20	17	Economic	Local	SOLR	50	59
05/20	17	Economic	System	SOLR	2196	2440
05/20	17	Economic	System	WIND	26	24
05/20	18	Economic	Local	SOLR	168	25
05/20	18	Economic	Local	WIND	6	
05/20	18	Economic	System	SOLR	496	1568
05/20	18	Economic	System	WIND	13	29
05/20	19	Economic	Local	SOLR	4	12
05/20	19	Economic	System	SOLR	50	255
05/20	19	Economic	System	WIND	3	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.