

Wind and Solar Curtailment April 14, 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.

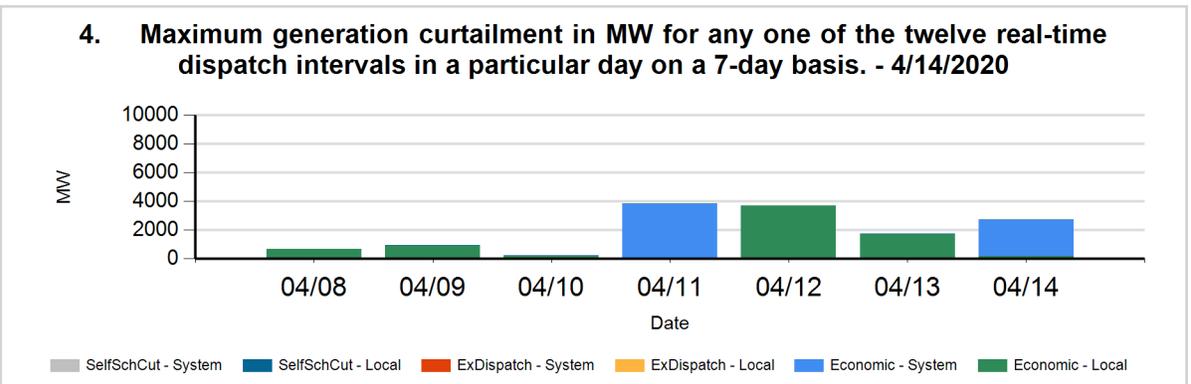
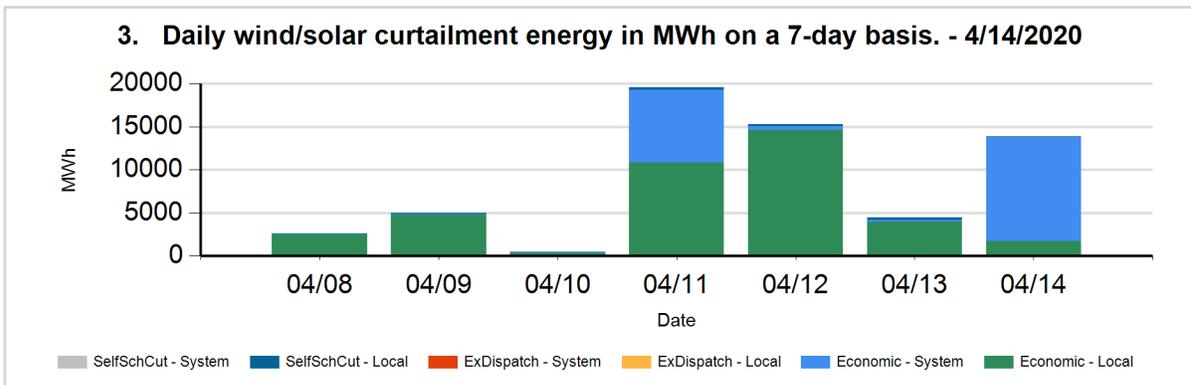
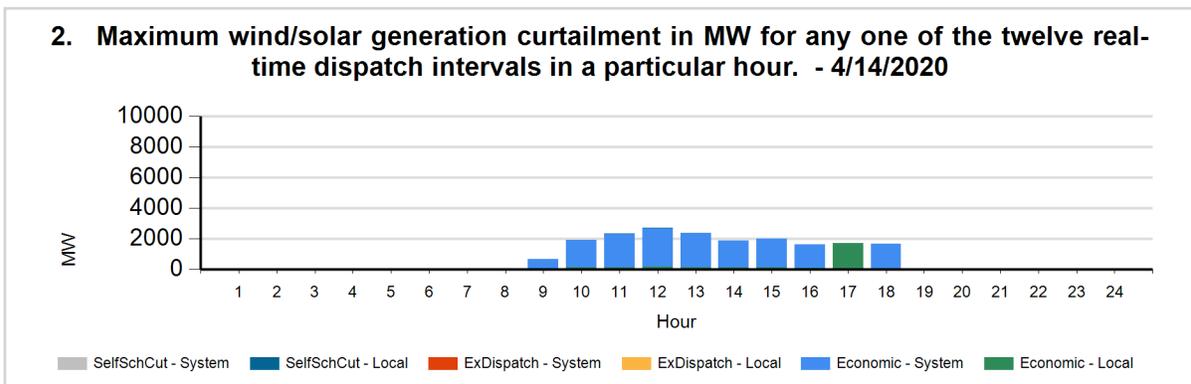
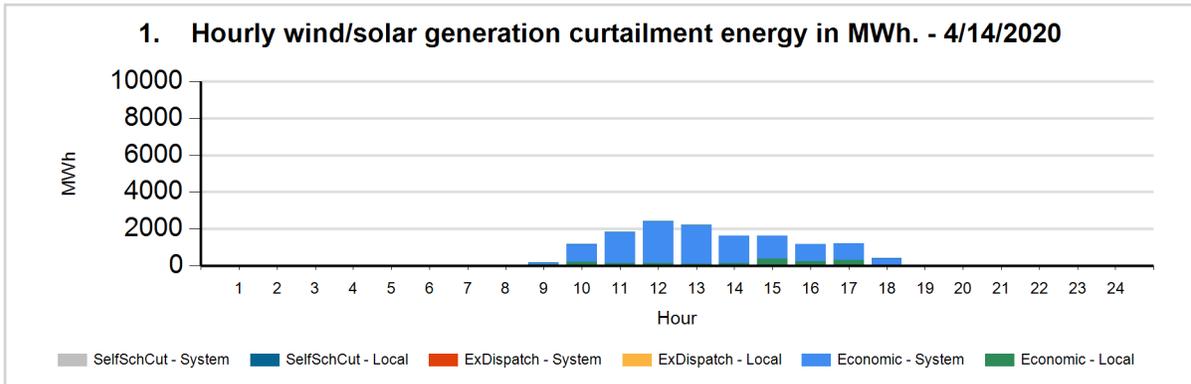
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

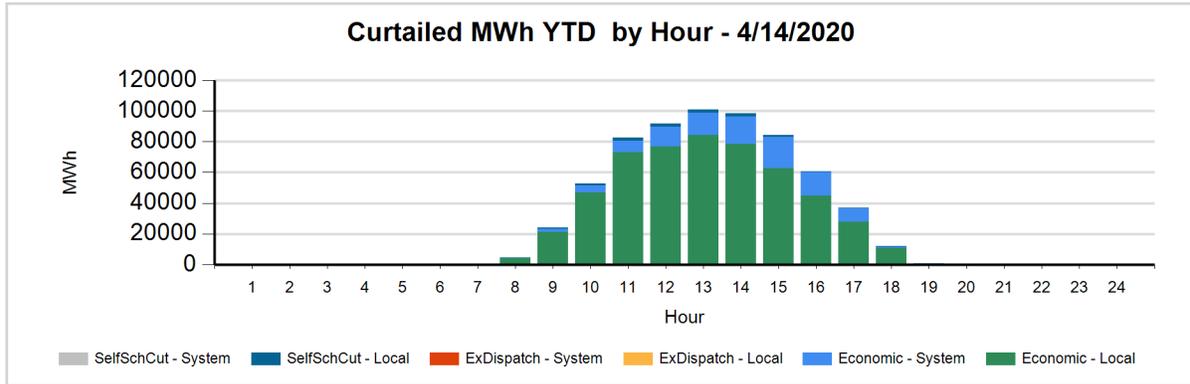
⁴For more information on oversupply conditions, please see:

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

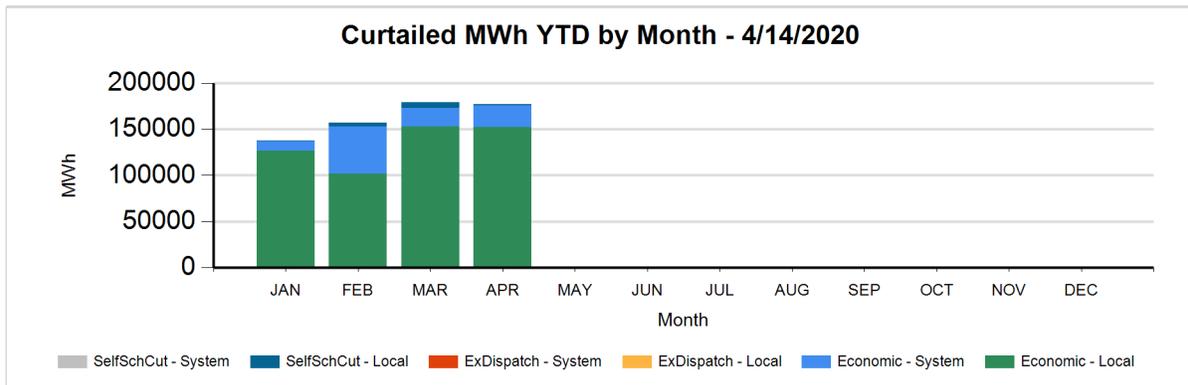
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/14/2020
LocalEconomic	533,055
LocalSelfSchCut	12,303
SystemEconomic	105,927
TOTAL	651,286

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/14	8	Economic	Local	SOLR	4	22
04/14	8	Economic	Local	WIND	0	
04/14	8	Economic	System	SOLR	6	
04/14	8	SelfSchCut	Local	SOLR	5	14
04/14	9	Economic	Local	SOLR	49	47
04/14	9	Economic	Local	WIND	4	6
04/14	9	Economic	System	SOLR	118	608
04/14	9	Economic	System	WIND	2	9
04/14	9	SelfSchCut	Local	SOLR	5	
04/14	10	Economic	Local	SOLR	186	118
04/14	10	Economic	Local	WIND	1	
04/14	10	Economic	System	SOLR	963	1767
04/14	10	Economic	System	WIND	5	13
04/14	10	SelfSchCut	Local	SOLR	12	
04/14	11	Economic	Local	SOLR	119	136
04/14	11	Economic	System	SOLR	1672	2146
04/14	11	Economic	System	WIND	22	22
04/14	11	SelfSchCut	Local	SOLR	23	21
04/14	12	Economic	Local	SOLR	145	146
04/14	12	Economic	System	SOLR	2230	2507
04/14	12	Economic	System	WIND	25	23
04/14	12	SelfSchCut	Local	SOLR	13	14
04/14	13	Economic	Local	SOLR	109	111
04/14	13	Economic	System	SOLR	2079	2248
04/14	13	Economic	System	WIND	17	25
04/14	13	SelfSchCut	Local	SOLR	1	
04/14	14	Economic	Local	SOLR	125	133
04/14	14	Economic	System	SOLR	1502	1717
04/14	14	Economic	System	WIND	7	6
04/14	15	Economic	Local	SOLR	370	120
04/14	15	Economic	Local	WIND	4	5

04/14	15	Economic	System	SOLR	1238	1882
04/14	15	Economic	System	WIND	8	10
04/14	16	Economic	Local	SOLR	242	87
04/14	16	Economic	Local	WIND	2	
04/14	16	Economic	System	SOLR	917	1526
04/14	16	Economic	System	WIND	8	10
04/14	17	Economic	Local	SOLR	316	1713
04/14	17	Economic	Local	WIND	1	7
04/14	17	Economic	System	SOLR	900	
04/14	17	Economic	System	WIND	6	
04/14	18	Economic	Local	SOLR	27	42
04/14	18	Economic	System	SOLR	385	1628
04/14	18	Economic	System	WIND	2	5
04/14	18	SelfSchCut	Local	SOLR	1	
04/14	19	Economic	Local	SOLR	2	8

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.