

Wind and Solar Curtailment April 11, 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.

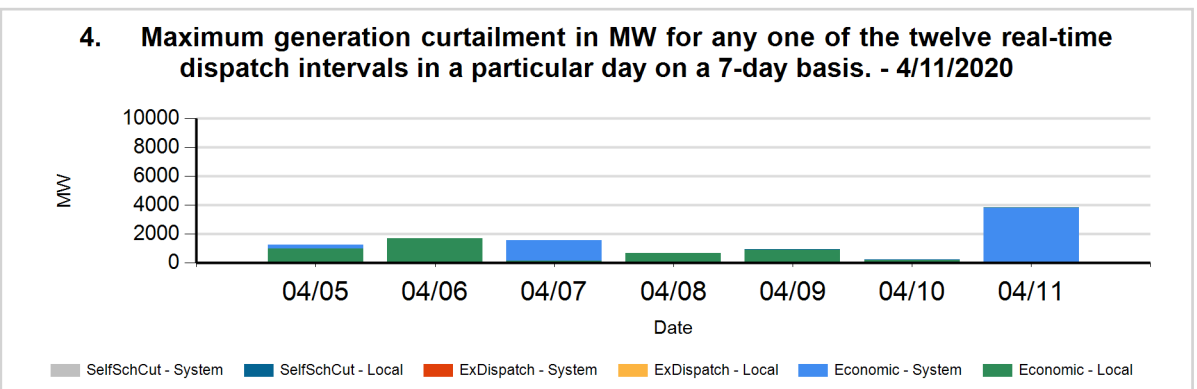
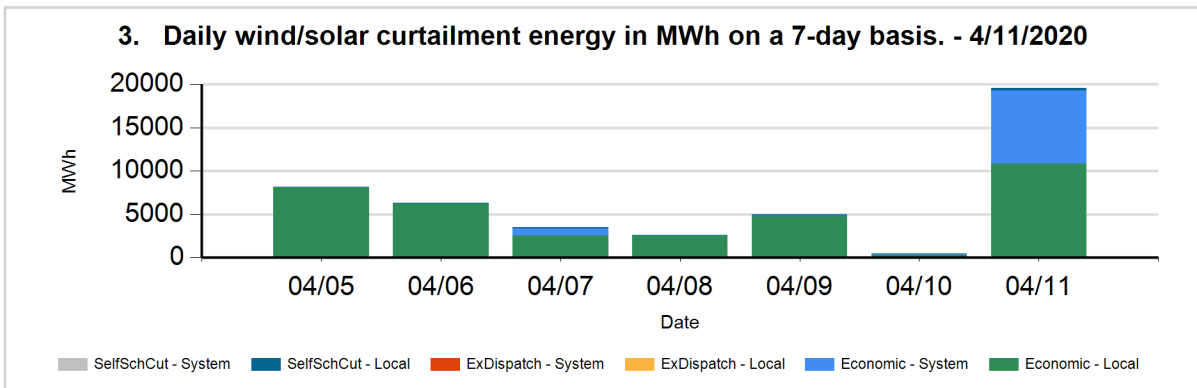
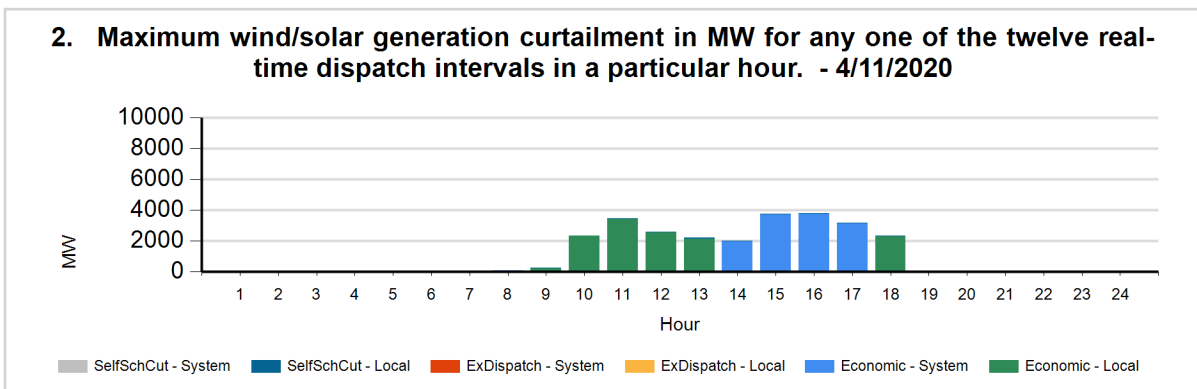
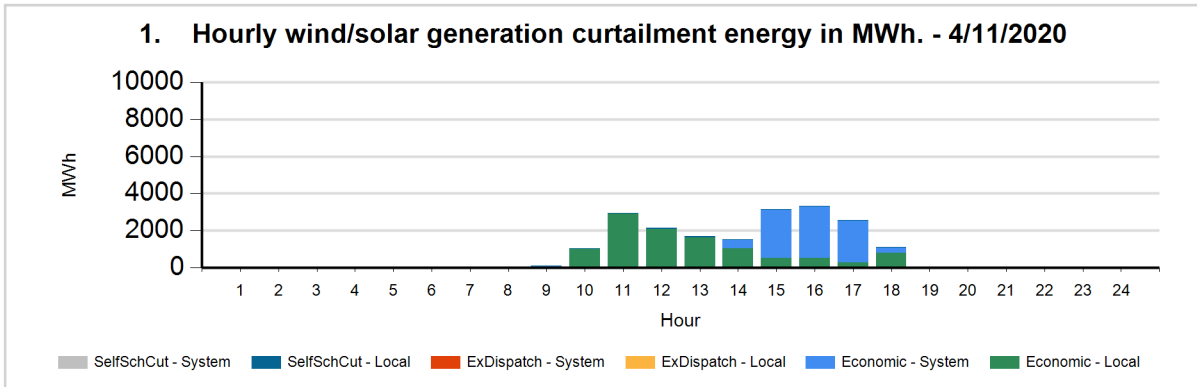
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

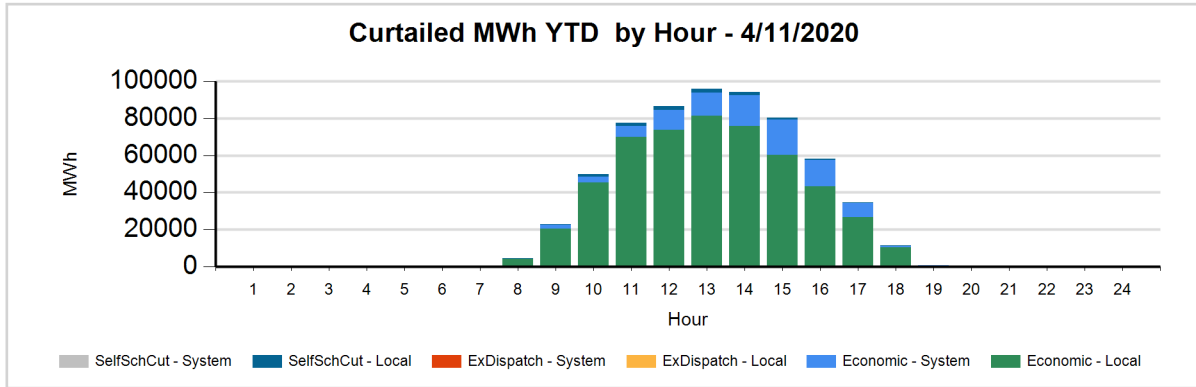
⁴For more information on oversupply conditions, please see:

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

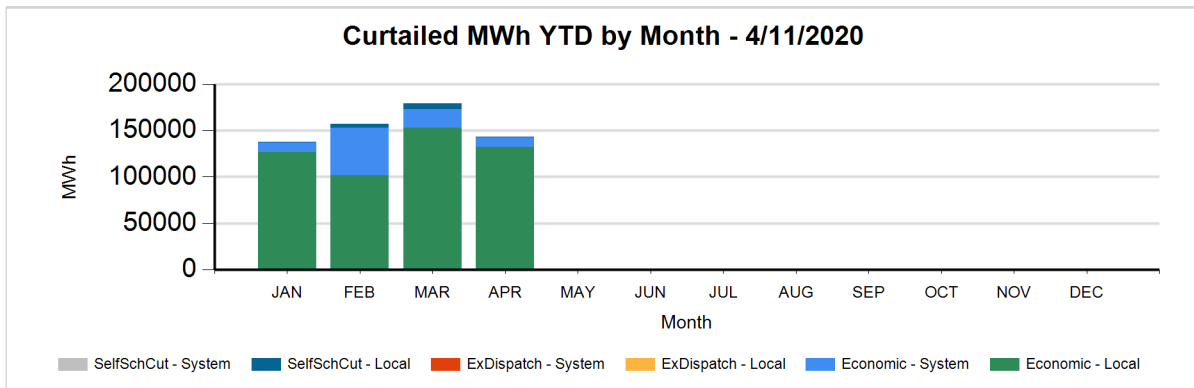
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/11/2020
LocalEconomic	512,837
LocalSelfSchCut	11,596
SystemEconomic	93,201
TOTAL	617,634

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/11	8	Economic	Local	SOLR	0	
04/11	8	Economic	System	SOLR	9	54
04/11	8	Economic	System	WIND	4	22
04/11	9	Economic	Local	SOLR	75	229
04/11	9	Economic	System	SOLR	1	
04/11	9	SelfSchCut	Local	SOLR	16	32
04/11	10	Economic	Local	SOLR	1020	2318
04/11	10	Economic	Local	WIND	3	12
04/11	10	SelfSchCut	Local	SOLR	5	
04/11	11	Economic	Local	SOLR	2876	3394
04/11	11	Economic	Local	WIND	11	11
04/11	11	SelfSchCut	Local	SOLR	35	39
04/11	12	Economic	Local	SOLR	2070	2543
04/11	12	Economic	Local	WIND	6	11
04/11	12	SelfSchCut	Local	SOLR	63	19
04/11	13	Economic	Local	SOLR	1621	2129
04/11	13	Economic	Local	WIND	1	6
04/11	13	SelfSchCut	Local	SOLR	78	84
04/11	14	Economic	Local	SOLR	1023	40
04/11	14	Economic	Local	WIND	1	
04/11	14	Economic	System	SOLR	453	1925
04/11	14	Economic	System	WIND	7	20
04/11	14	SelfSchCut	Local	SOLR	50	14
04/11	15	Economic	Local	SOLR	520	18
04/11	15	Economic	Local	WIND	6	
04/11	15	Economic	System	SOLR	2548	3610
04/11	15	Economic	System	WIND	56	101
04/11	15	SelfSchCut	Local	SOLR	14	14
04/11	16	Economic	Local	SOLR	489	21
04/11	16	Economic	Local	WIND	9	
04/11	16	Economic	System	SOLR	2697	3652

04/11	16	Economic	System	WIND	99	127
04/11	16	SelfSchCut	Local	SOLR	9	13
04/11	17	Economic	Local	SOLR	259	28
04/11	17	Economic	Local	WIND	13	
04/11	17	Economic	System	SOLR	2190	2951
04/11	17	Economic	System	WIND	103	166
04/11	17	SelfSchCut	Local	SOLR	5	9
04/11	18	Economic	Local	SOLR	762	2283
04/11	18	Economic	Local	WIND	14	63
04/11	18	Economic	System	SOLR	311	
04/11	18	Economic	System	WIND	11	
04/11	18	SelfSchCut	Local	SOLR	2	6
04/11	19	Economic	System	SOLR	4	23

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.