

Wind and Solar Curtailment April 12, 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.

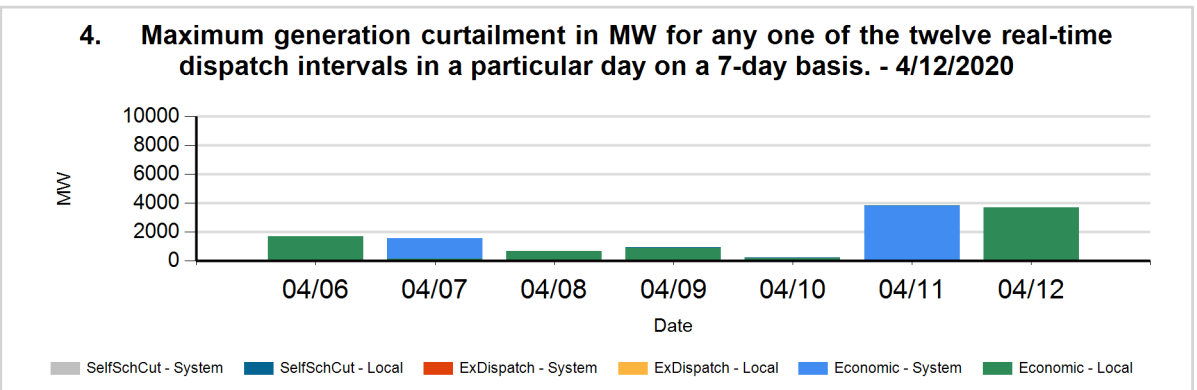
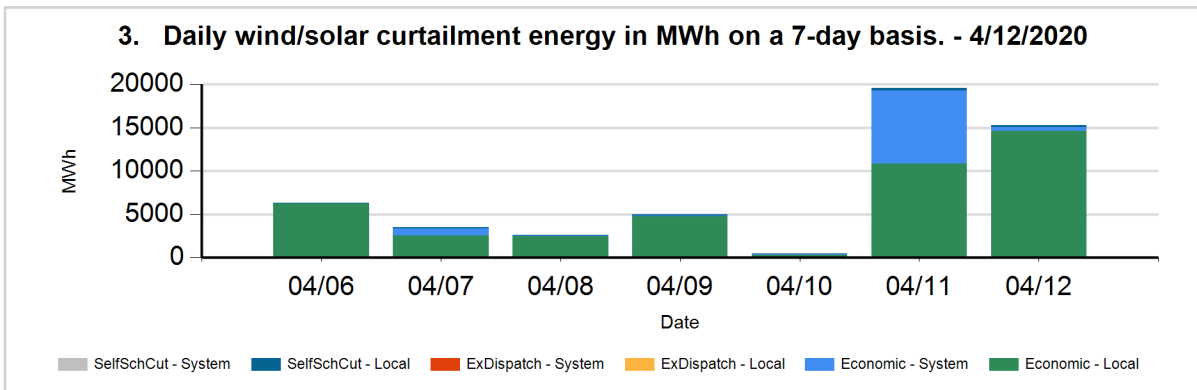
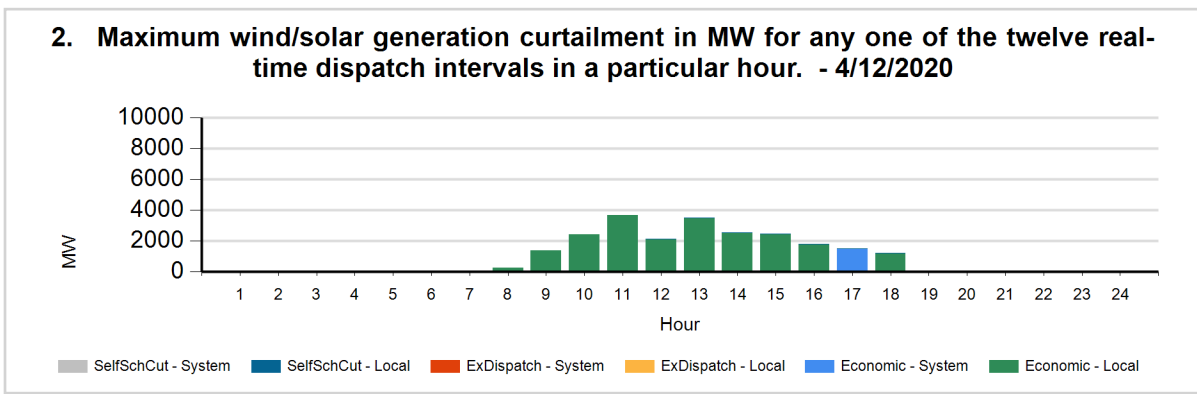
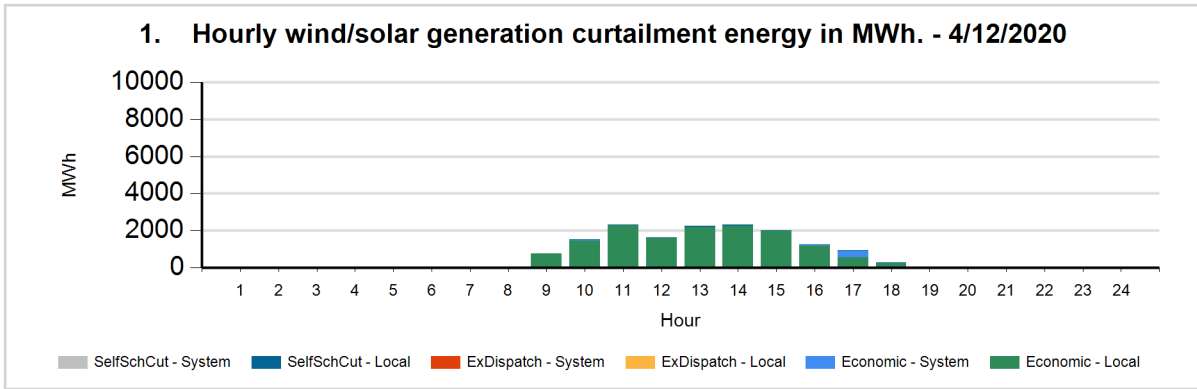
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

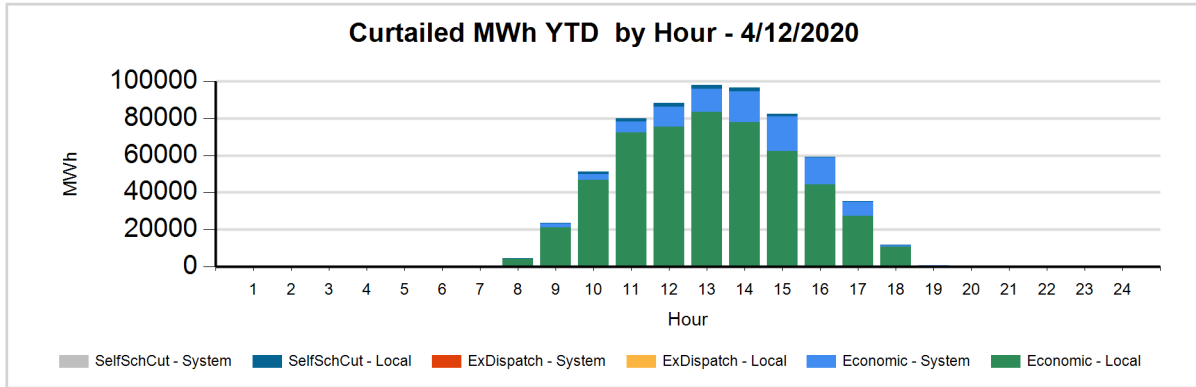
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

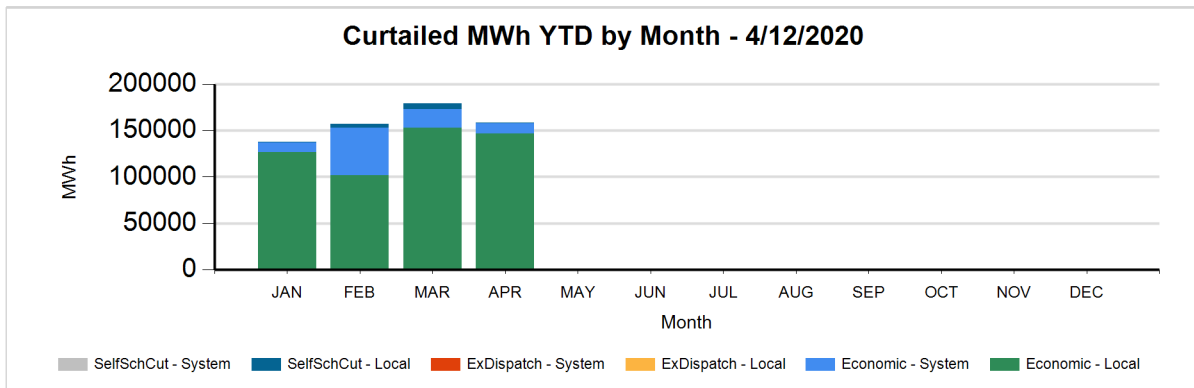
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/12/2020
LocalEconomic	527,450
LocalSelfSchCut	11,890
SystemEconomic	93,590
TOTAL	632,930

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/12	8	Economic	Local	SOLR	25	233
04/12	9	Economic	Local	SOLR	772	1358
04/12	9	Economic	Local	WIND	1	12
04/12	10	Economic	Local	SOLR	1489	2418
04/12	10	Economic	Local	WIND	3	11
04/12	10	Economic	System	SOLR	1	
04/12	10	SelfSchCut	Local	SOLR	22	
04/12	11	Economic	Local	SOLR	2276	3621
04/12	11	Economic	Local	WIND	24	65
04/12	11	Economic	System	SOLR	0	
04/12	11	Economic	System	WIND	0	
04/12	11	SelfSchCut	Local	SOLR	16	
04/12	12	Economic	Local	SOLR	1573	2066
04/12	12	Economic	Local	WIND	11	32
04/12	12	SelfSchCut	Local	SOLR	51	16
04/12	13	Economic	Local	SOLR	2140	3386
04/12	13	Economic	Local	WIND	30	53
04/12	13	SelfSchCut	Local	SOLR	65	62
04/12	14	Economic	Local	SOLR	2189	2421
04/12	14	Economic	Local	WIND	56	69
04/12	14	SelfSchCut	Local	SOLR	63	61
04/12	15	Economic	Local	SOLR	1913	2348
04/12	15	Economic	Local	WIND	50	70
04/12	15	SelfSchCut	Local	SOLR	54	59
04/12	16	Economic	Local	SOLR	1191	1731
04/12	16	Economic	Local	WIND	25	46
04/12	16	Economic	System	SOLR	8	12
04/12	16	Economic	System	WIND	1	
04/12	16	SelfSchCut	Local	SOLR	16	18
04/12	17	Economic	Local	SOLR	549	13
04/12	17	Economic	Local	WIND	19	

04/12	17	Economic	System	SOLR	339	1412
04/12	17	Economic	System	WIND	22	74
04/12	17	SelfSchCut	Local	SOLR	8	9
04/12	18	Economic	Local	SOLR	274	1196
04/12	18	Economic	Local	WIND	1	8
04/12	18	Economic	System	SOLR	12	
04/12	18	SelfSchCut	Local	SOLR	1	3
04/12	19	Economic	Local	SOLR	2	
04/12	19	Economic	System	SOLR	7	32

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.