

Wind and Solar Curtailment April 13, 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.

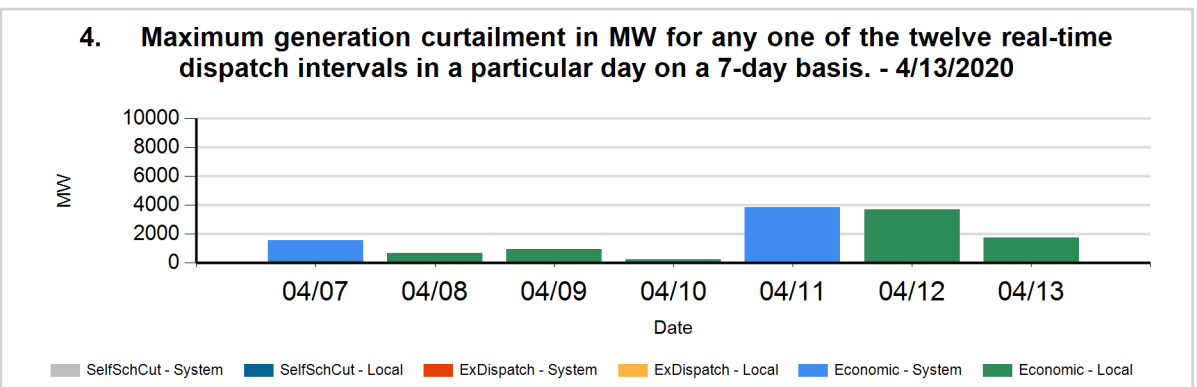
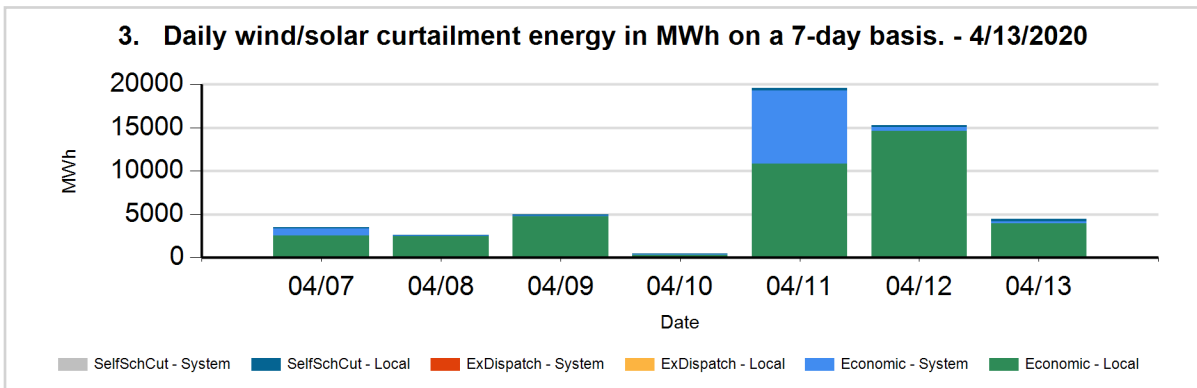
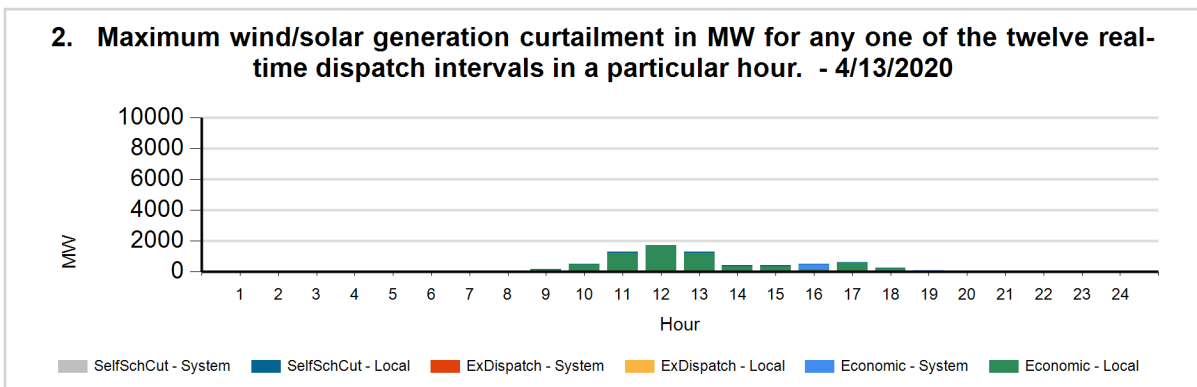
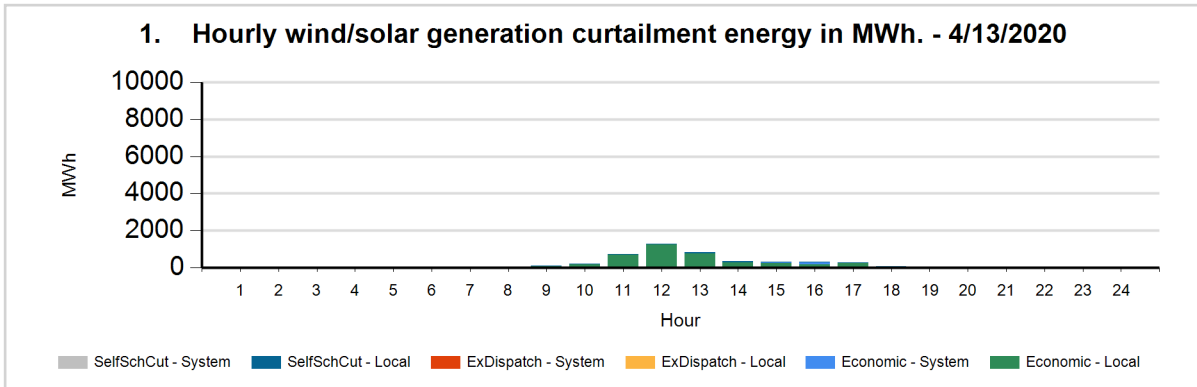
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

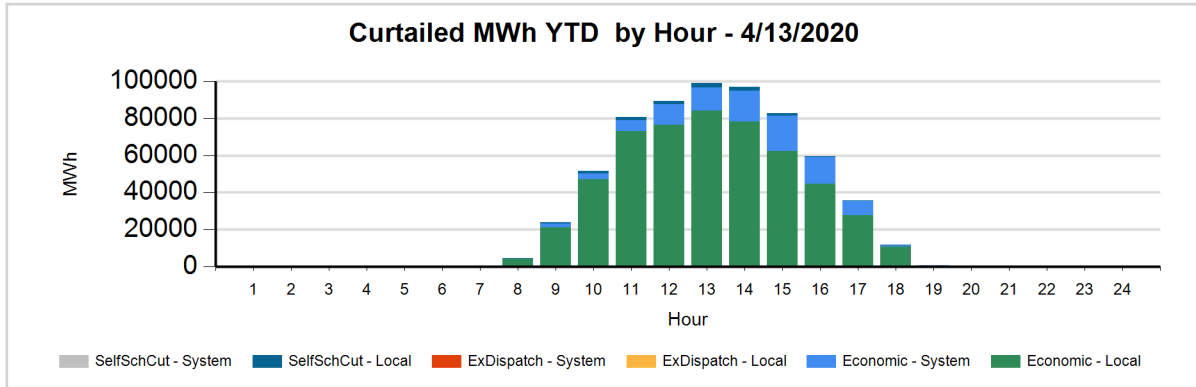
⁴For more information on oversupply conditions, please see:

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

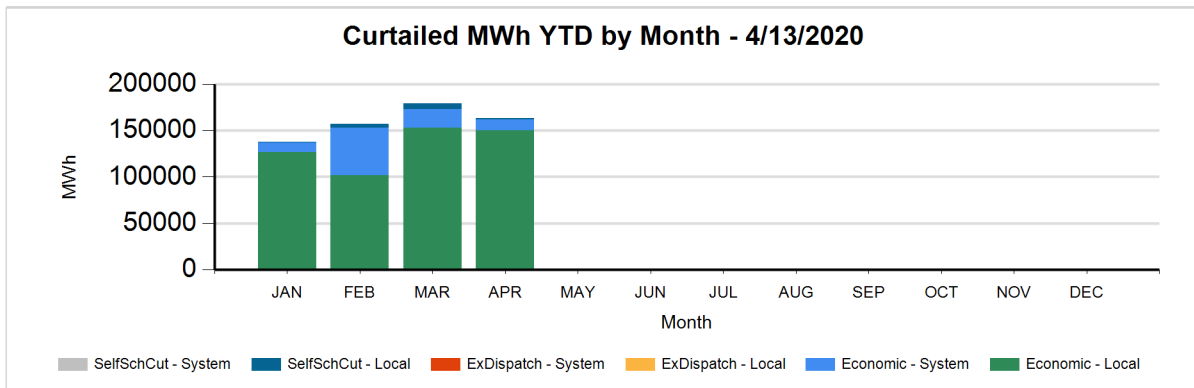
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/13/2020
LocalEconomic	531,349
LocalSelfSchCut	12,243
SystemEconomic	93,813
TOTAL	637,405

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/13	8	Economic	Local	SOLR	4	37
04/13	8	Economic	System	SOLR	0	
04/13	8	SelfSchCut	Local	SOLR	1	
04/13	9	Economic	Local	SOLR	62	155
04/13	9	Economic	Local	WIND	0	2
04/13	9	Economic	System	SOLR	0	
04/13	9	SelfSchCut	Local	SOLR	23	8
04/13	10	Economic	Local	SOLR	170	490
04/13	10	Economic	Local	WIND	26	
04/13	10	SelfSchCut	Local	SOLR	9	17
04/13	11	Economic	Local	SOLR	686	1198
04/13	11	Economic	Local	WIND	2	9
04/13	11	SelfSchCut	Local	SOLR	25	69
04/13	12	Economic	Local	SOLR	1210	1591
04/13	12	Economic	Local	WIND	25	66
04/13	12	SelfSchCut	Local	SOLR	58	67
04/13	13	Economic	Local	SOLR	753	1195
04/13	13	Economic	Local	WIND	5	11
04/13	13	SelfSchCut	Local	SOLR	67	68
04/13	14	Economic	Local	SOLR	263	326
04/13	14	Economic	Local	WIND	4	
04/13	14	SelfSchCut	Local	SOLR	70	67
04/13	15	Economic	Local	SOLR	251	348
04/13	15	Economic	Local	WIND	4	
04/13	15	Economic	System	SOLR	18	
04/13	15	Economic	System	WIND	0	
04/13	15	SelfSchCut	Local	SOLR	46	68
04/13	16	Economic	Local	SOLR	155	95
04/13	16	Economic	Local	WIND	6	14
04/13	16	Economic	System	SOLR	141	350
04/13	16	Economic	System	WIND	5	12

04/13	16	SelfSchCut	Local	SOLR	11	13
04/13	17	Economic	Local	SOLR	219	624
04/13	17	Economic	Local	WIND	7	12
04/13	17	Economic	System	SOLR	35	
04/13	17	Economic	System	WIND	1	3
04/13	17	SelfSchCut	Local	SOLR	29	
04/13	18	Economic	Local	SOLR	48	214
04/13	18	Economic	Local	WIND	0	
04/13	18	SelfSchCut	Local	SOLR	13	43
04/13	19	Economic	Local	SOLR	1	
04/13	19	Economic	System	SOLR	9	39
04/13	19	Economic	System	WIND	13	22

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.