

## Wind and Solar Curtailment April 15, 2020

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why<sup>1</sup>. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation<sup>2</sup>.

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion<sup>3</sup>.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply<sup>4</sup>.
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.

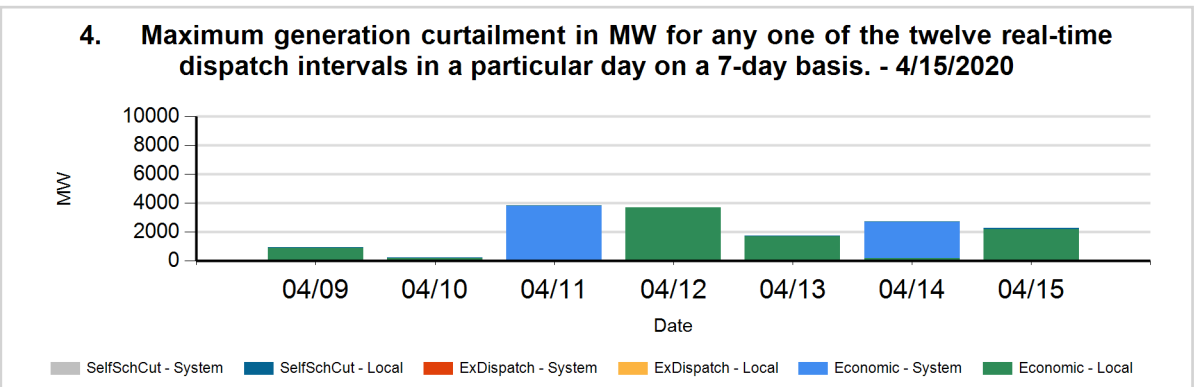
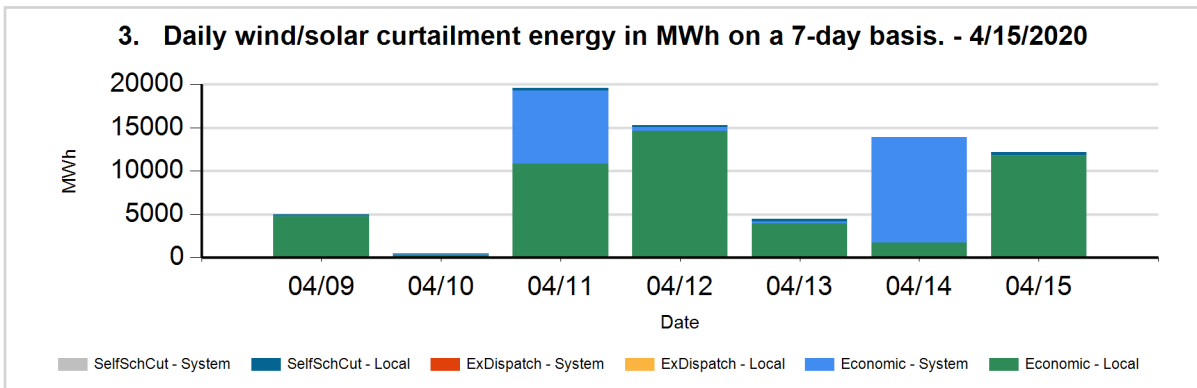
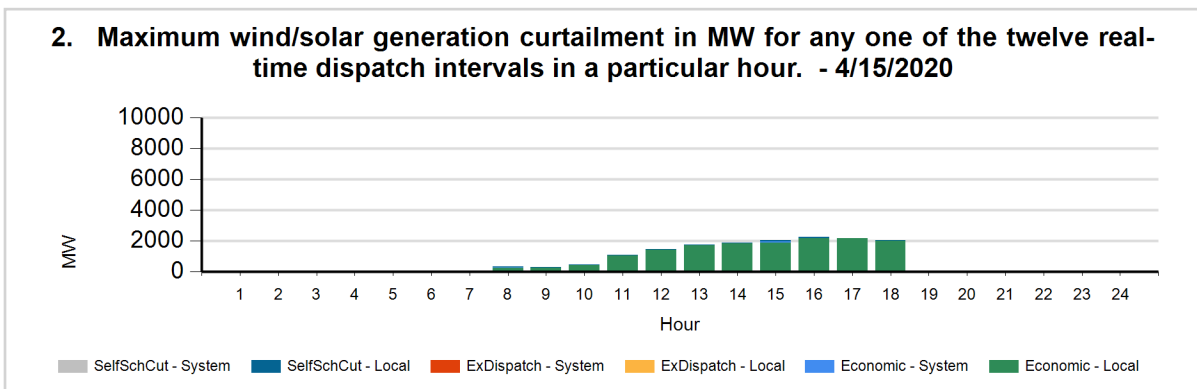
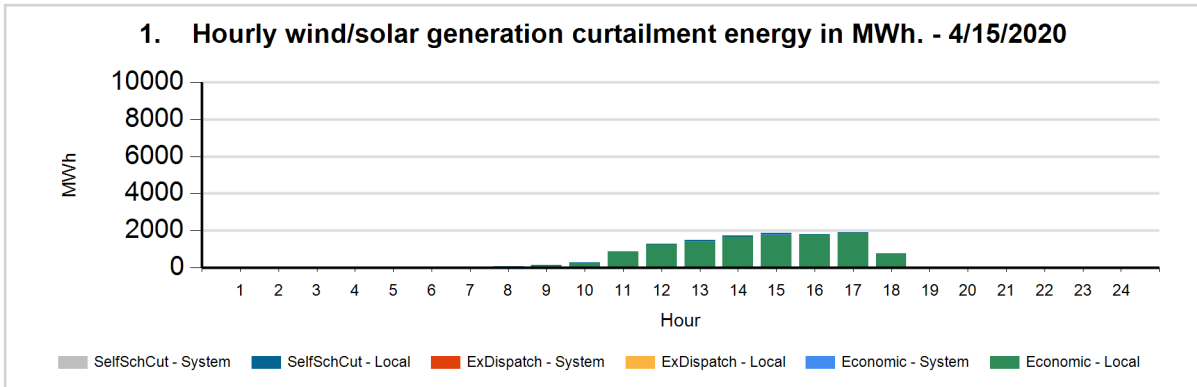
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

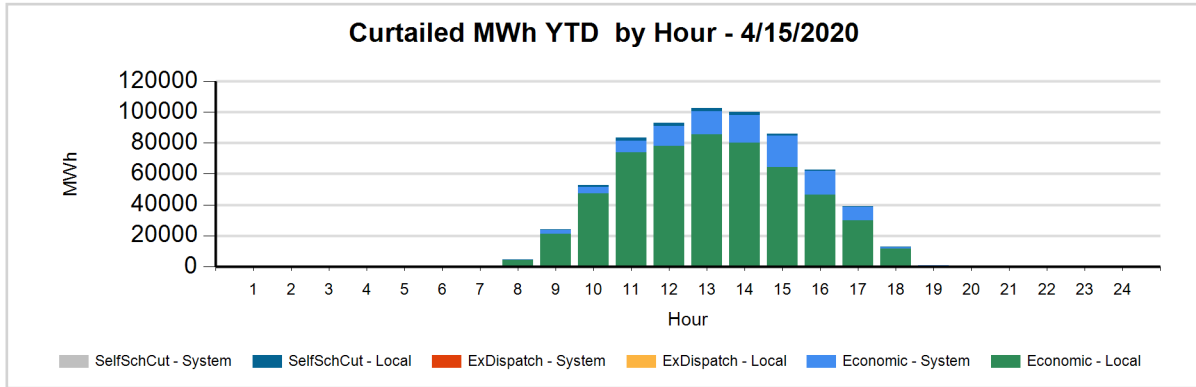
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<sup>4</sup>For more information on oversupply conditions, please see: [https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf)

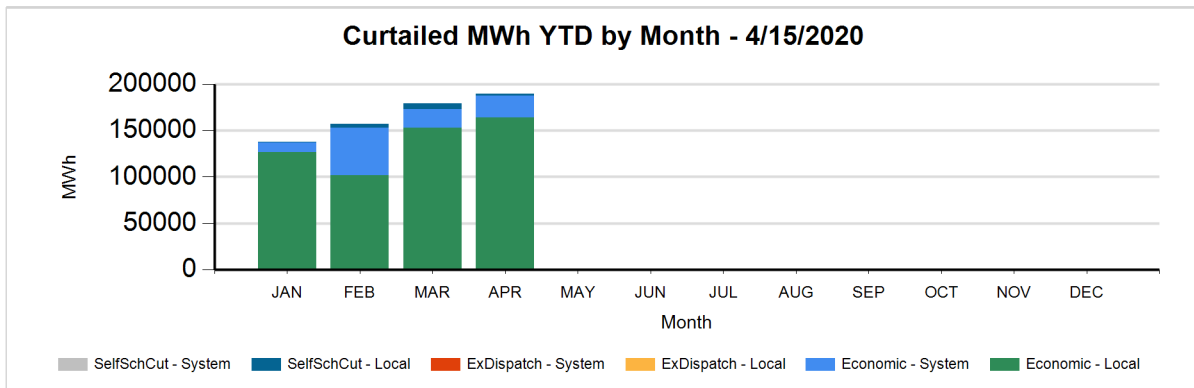
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/15/2020
LocalEconomic	544,810
LocalSelfSchCut	12,702
SystemEconomic	105,954
TOTAL	663,466

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/15	8	Economic	Local	SOLR	63	299
04/15	8	Economic	System	SOLR	6	1
04/15	8	SelfSchCut	Local	SOLR	6	41
04/15	9	Economic	Local	SOLR	120	278
04/15	9	SelfSchCut	Local	SOLR	30	15
04/15	10	Economic	Local	SOLR	270	426
04/15	10	Economic	Local	WIND	0	
04/15	10	SelfSchCut	Local	SOLR	14	20
04/15	11	Economic	Local	SOLR	829	1059
04/15	11	SelfSchCut	Local	SOLR	20	29
04/15	12	Economic	Local	SOLR	1241	1400
04/15	12	SelfSchCut	Local	SOLR	51	72
04/15	13	Economic	Local	SOLR	1413	1715
04/15	13	Economic	System	SOLR	10	
04/15	13	SelfSchCut	Local	SOLR	51	27
04/15	14	Economic	Local	SOLR	1657	1814
04/15	14	SelfSchCut	Local	SOLR	79	78
04/15	15	Economic	Local	SOLR	1778	1855
04/15	15	Economic	Local	WIND	1	8
04/15	15	Economic	System	SOLR	9	106
04/15	15	SelfSchCut	Local	SOLR	78	71
04/15	16	Economic	Local	SOLR	1765	2169
04/15	16	Economic	Local	WIND	1	6
04/15	16	SelfSchCut	Local	SOLR	19	66
04/15	17	Economic	Local	SOLR	1854	2168
04/15	17	Economic	Local	WIND	5	18
04/15	17	SelfSchCut	Local	SOLR	39	
04/15	18	Economic	Local	SOLR	747	1997
04/15	18	Economic	Local	WIND	5	18
04/15	18	SelfSchCut	Local	SOLR	12	41
04/15	19	Economic	Local	SOLR	6	38
04/15	19	Economic	System	SOLR	3	



California ISO

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](mailto:ShortTermForecasting@caiso.com).