

## Wind and Solar Curtailment March 29, 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.

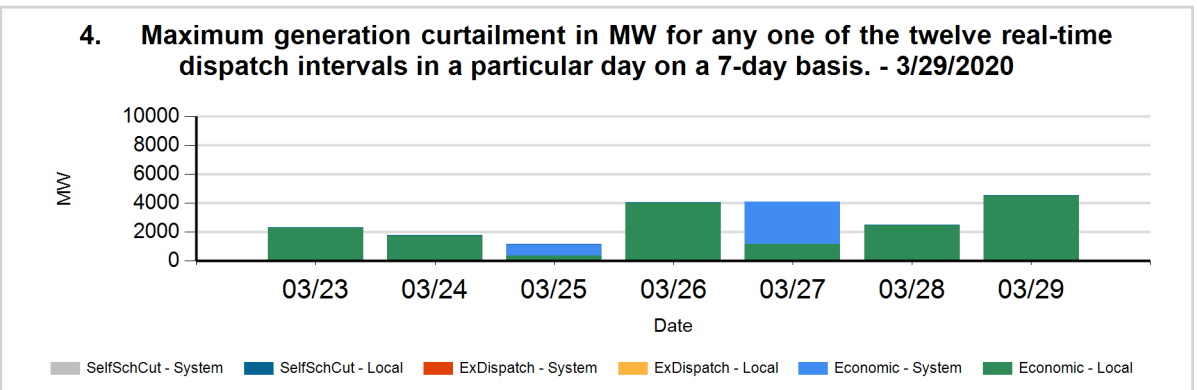
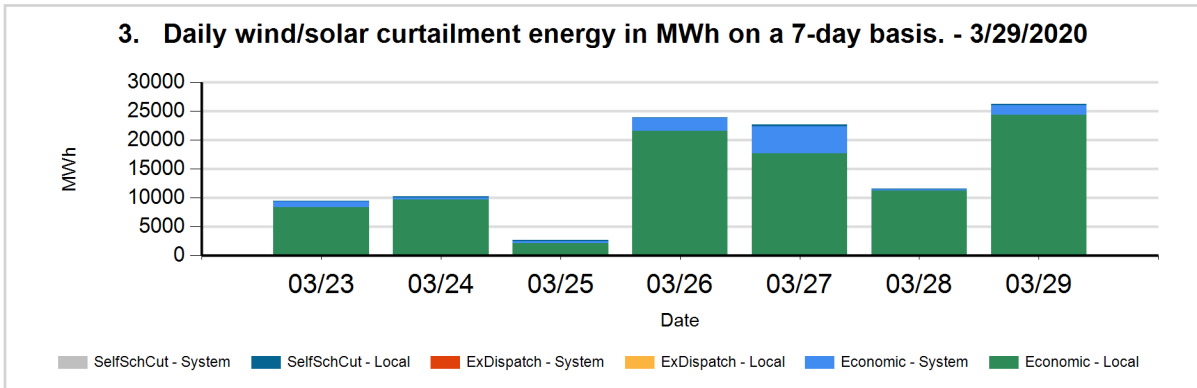
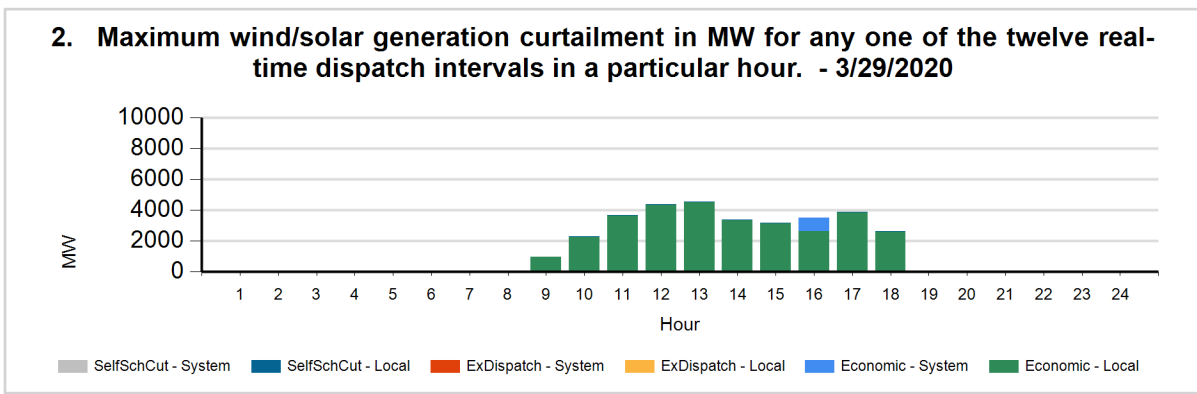
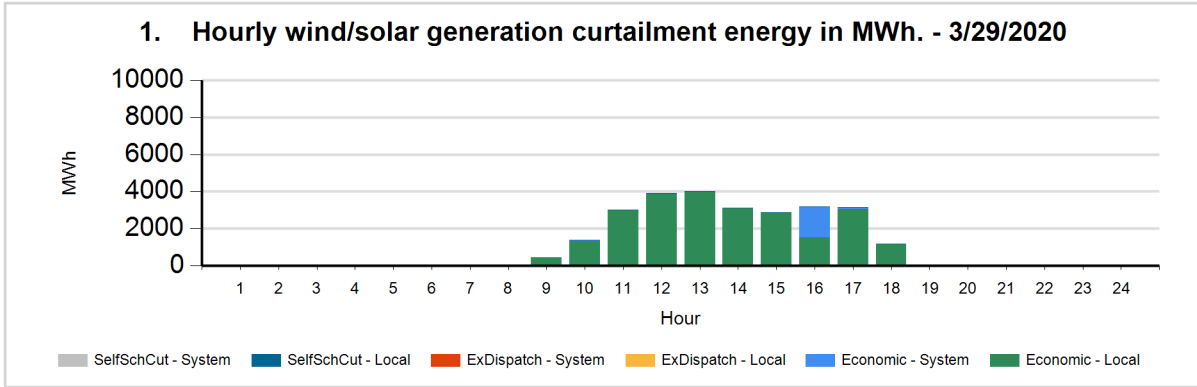
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

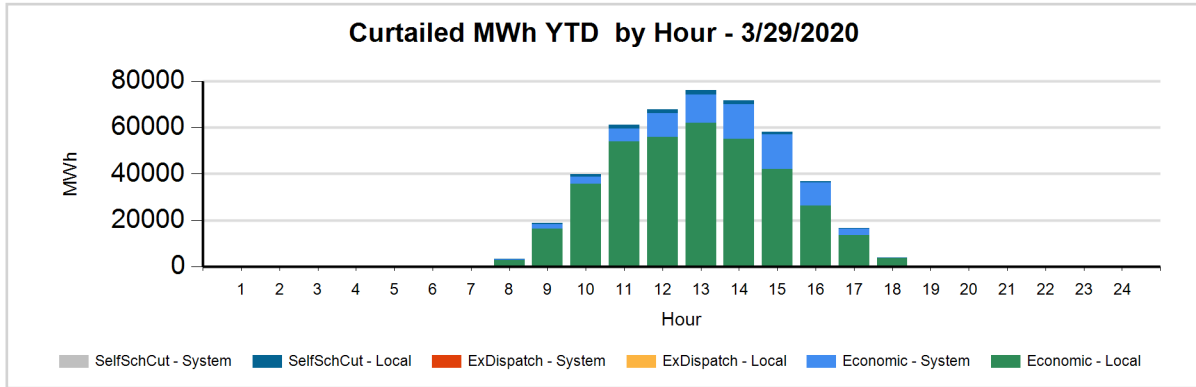
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

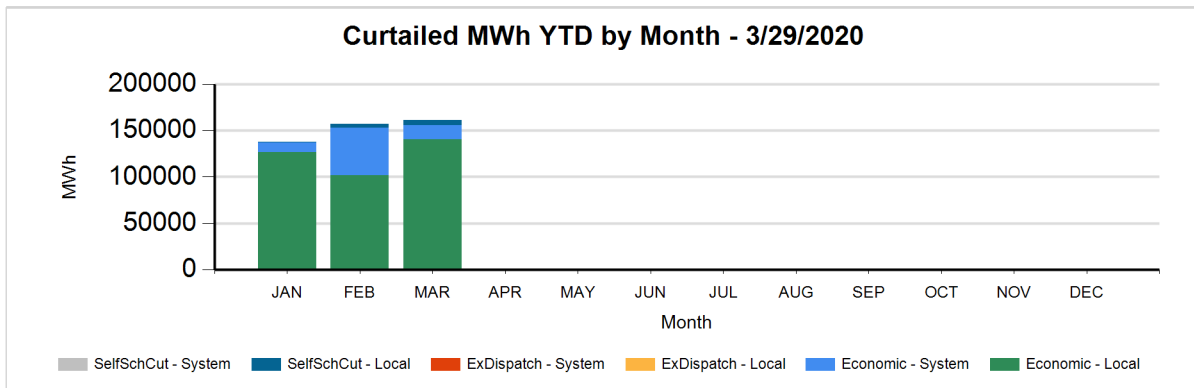
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/29/2020
LocalEconomic	368,672
LocalSelfSchCut	10,299
SystemEconomic	77,084
TOTAL	456,056

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/29	8	Economic	Local	SOLR	1	
03/29	8	Economic	System	SOLR	4	21
03/29	9	Economic	Local	SOLR	450	943
03/29	9	Economic	Local	WIND	4	12
03/29	9	Economic	System	SOLR	9	
03/29	10	Economic	Local	SOLR	1294	2181
03/29	10	Economic	Local	WIND	62	97
03/29	10	Economic	System	SOLR	2	
03/29	10	SelfSchCut	Local	SOLR	14	8
03/29	11	Economic	Local	SOLR	2880	3593
03/29	11	Economic	Local	WIND	90	57
03/29	11	SelfSchCut	Local	SOLR	23	39
03/29	12	Economic	Local	SOLR	3753	4233
03/29	12	Economic	Local	WIND	111	118
03/29	12	SelfSchCut	Local	SOLR	37	40
03/29	13	Economic	Local	SOLR	3858	4226
03/29	13	Economic	Local	WIND	107	268
03/29	13	SelfSchCut	Local	SOLR	46	45
03/29	14	Economic	Local	SOLR	2895	3158
03/29	14	Economic	Local	WIND	177	206
03/29	14	SelfSchCut	Local	SOLR	39	8
03/29	15	Economic	Local	SOLR	2690	2896
03/29	15	Economic	Local	WIND	172	221
03/29	15	SelfSchCut	Local	SOLR	20	55
03/29	16	Economic	Local	SOLR	1440	2556
03/29	16	Economic	Local	WIND	77	51
03/29	16	Economic	System	SOLR	1537	736
03/29	16	Economic	System	WIND	115	169
03/29	16	SelfSchCut	Local	SOLR	10	
03/29	17	Economic	Local	SOLR	2901	3591
03/29	17	Economic	Local	WIND	158	280

03/29	17	Economic	System	SOLR	63	
03/29	17	Economic	System	WIND	19	
03/29	17	SelfSchCut	Local	SOLR	7	9
03/29	18	Economic	Local	SOLR	1149	2494
03/29	18	Economic	Local	WIND	27	133
03/29	18	SelfSchCut	Local	SOLR	3	6
03/29	20	Economic	Local	WIND	1	11

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).