

## Wind and Solar Curtailment May 22, 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.

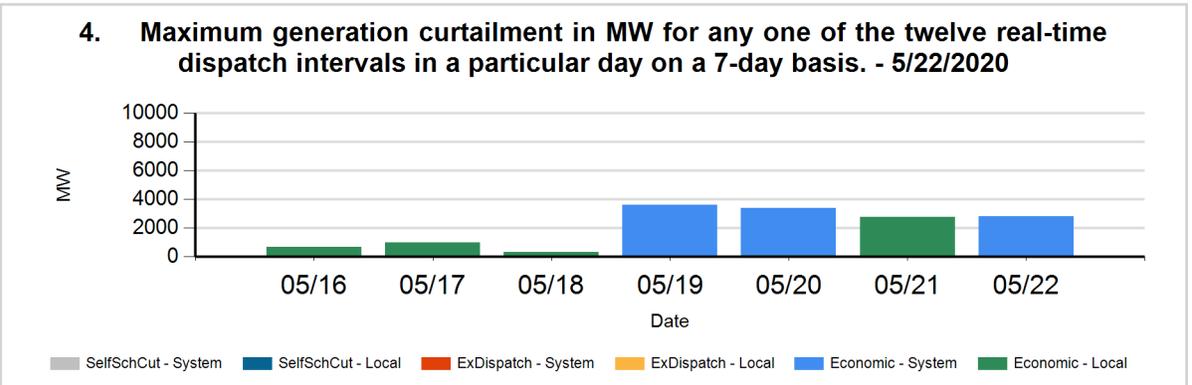
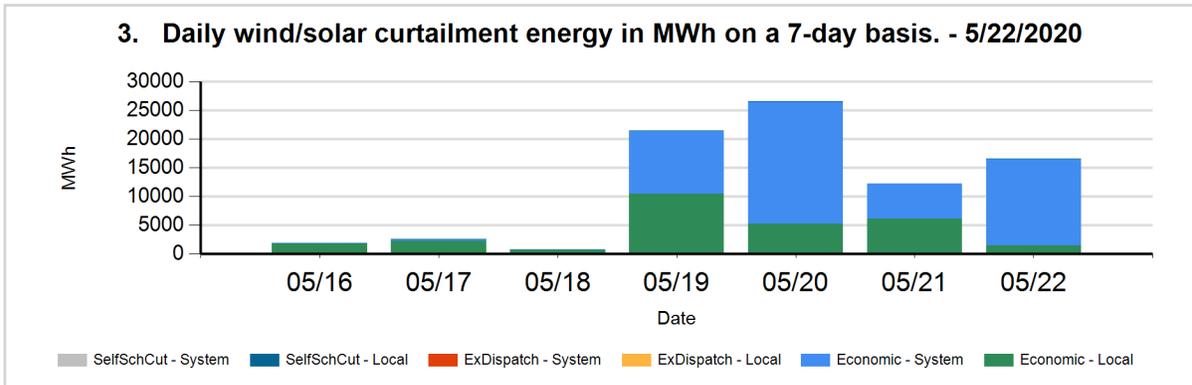
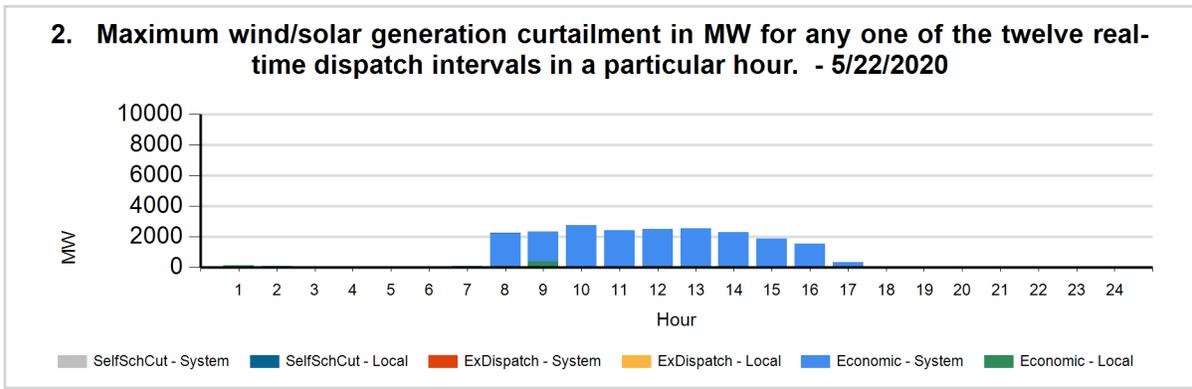
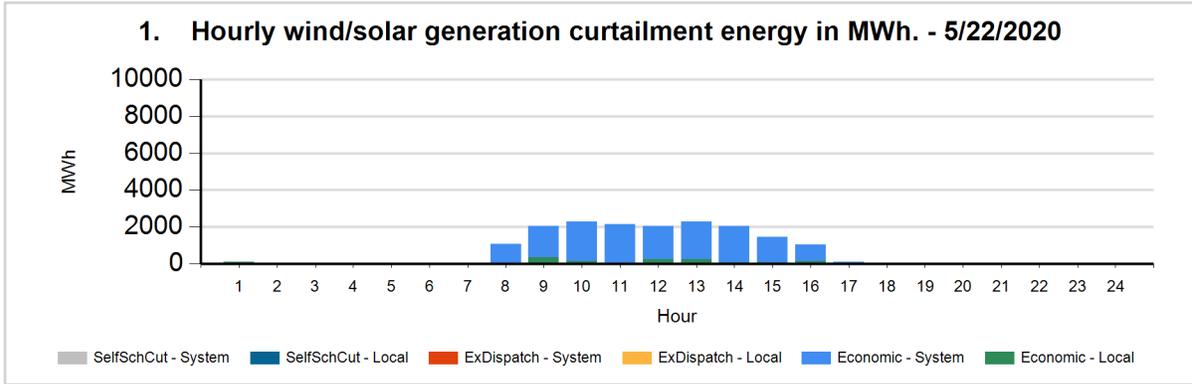
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

<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.

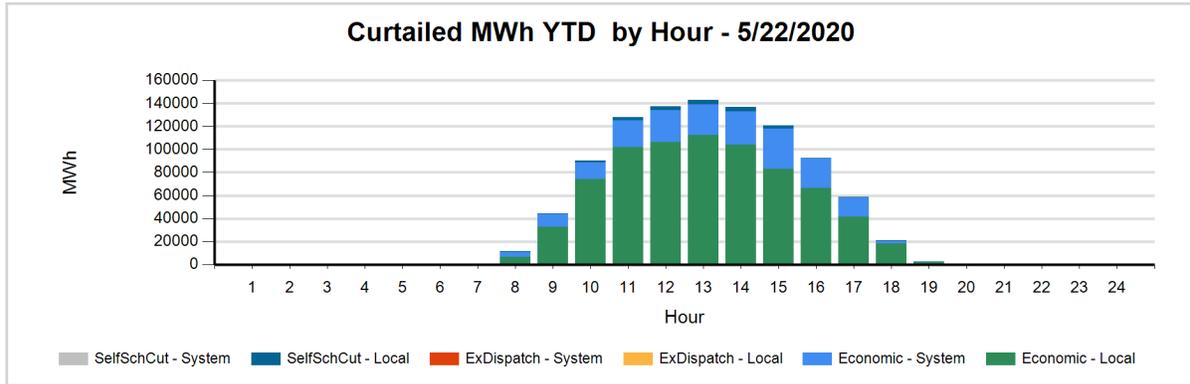
<sup>4</sup>For more information on oversupply conditions, please see:

[https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf)

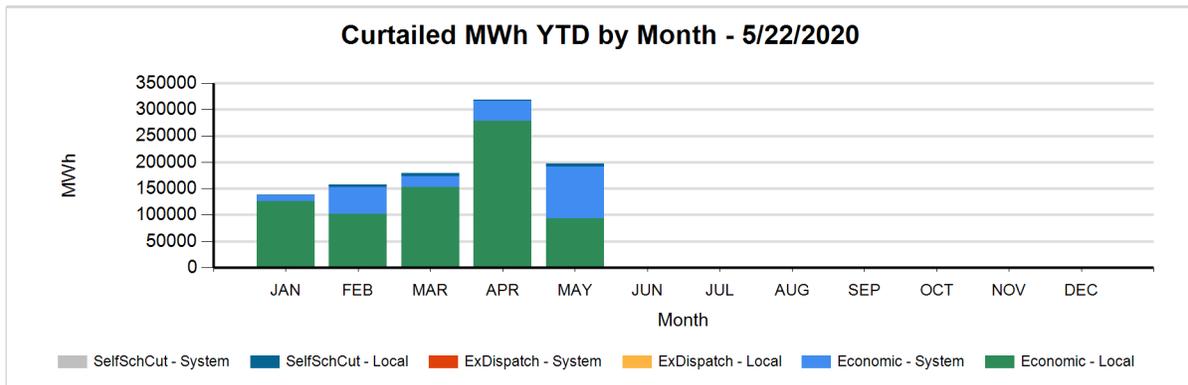
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/22/2020
LocalEconomic	752,248
LocalSelfSchCut	19,474
SystemEconomic	217,698
TOTAL	989,420

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/22	1	Economic	Local	WIND	100	139
05/22	2	Economic	Local	WIND	9	97
05/22	6	Economic	Local	SOLR	1	16
05/22	7	Economic	Local	SOLR	9	73
05/22	7	Economic	System	SOLR	6	
05/22	8	Economic	Local	SOLR	24	76
05/22	8	Economic	Local	WIND	1	
05/22	8	Economic	System	SOLR	992	2084
05/22	8	Economic	System	WIND	42	62
05/22	8	SelfSchCut	Local	SOLR	0	6
05/22	9	Economic	Local	SOLR	349	361
05/22	9	Economic	Local	WIND	5	
05/22	9	Economic	System	SOLR	1618	1906
05/22	9	Economic	System	WIND	55	65
05/22	9	SelfSchCut	Local	SOLR	0	
05/22	10	Economic	Local	SOLR	144	46
05/22	10	Economic	System	SOLR	2071	2650
05/22	10	Economic	System	WIND	73	74
05/22	11	Economic	Local	SOLR	20	26
05/22	11	Economic	System	SOLR	2045	2345
05/22	11	Economic	System	WIND	70	64
05/22	12	Economic	Local	SOLR	230	69
05/22	12	Economic	Local	WIND	5	
05/22	12	Economic	System	SOLR	1740	2348
05/22	12	Economic	System	WIND	53	75
05/22	13	Economic	Local	SOLR	229	99
05/22	13	Economic	Local	WIND	5	
05/22	13	Economic	System	SOLR	1987	2402
05/22	13	Economic	System	WIND	61	57
05/22	14	Economic	Local	SOLR	69	95
05/22	14	Economic	System	SOLR	1894	2140

05/22	14	Economic	System	WIND	67	70
05/22	15	Economic	Local	SOLR	48	55
05/22	15	Economic	System	SOLR	1342	1724
05/22	15	Economic	System	WIND	69	74
05/22	16	Economic	Local	SOLR	129	51
05/22	16	Economic	Local	WIND	3	
05/22	16	Economic	System	SOLR	865	1435
05/22	16	Economic	System	WIND	28	39
05/22	17	Economic	Local	SOLR	37	41
05/22	17	Economic	System	SOLR	58	255
05/22	17	Economic	System	WIND	5	25
05/22	18	Economic	Local	SOLR	12	42
05/22	19	Economic	Local	SOLR	5	16

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).