

## Wind and Solar Curtailment June 08, 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.

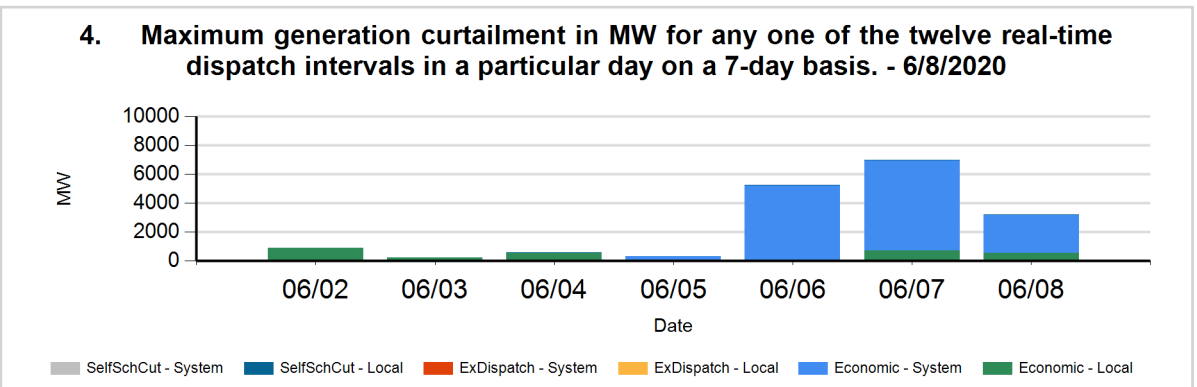
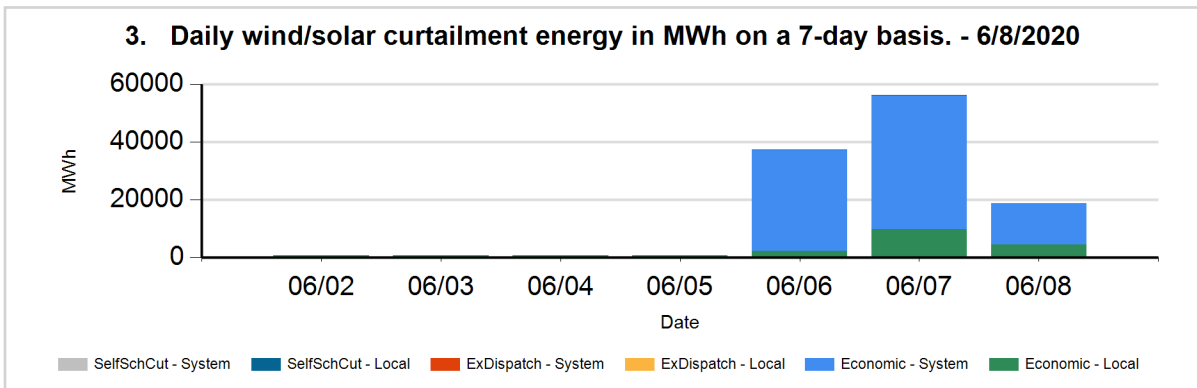
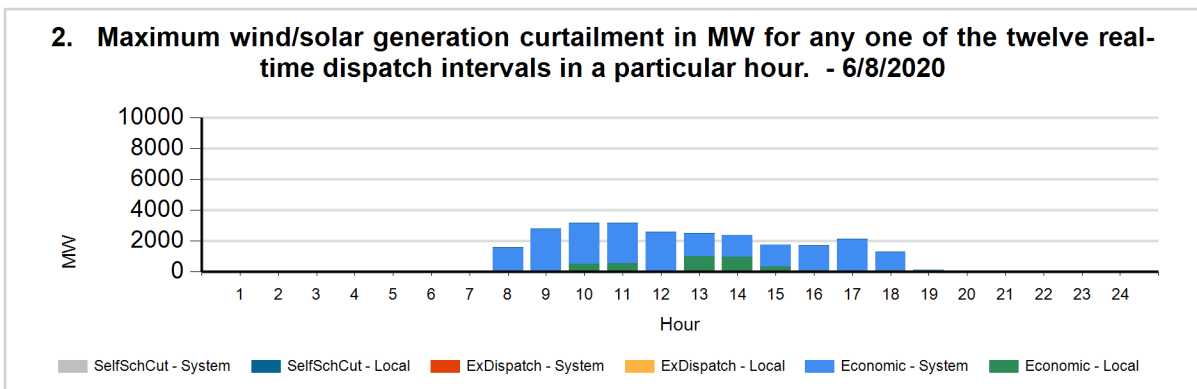
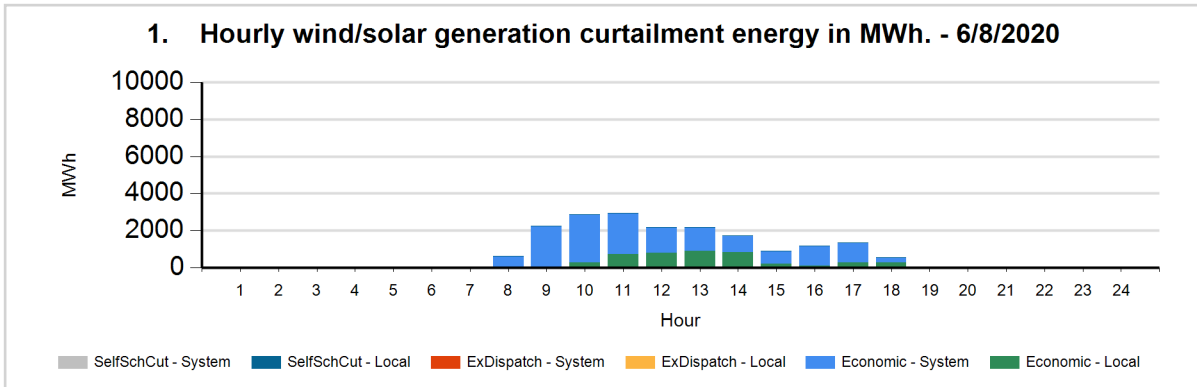
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

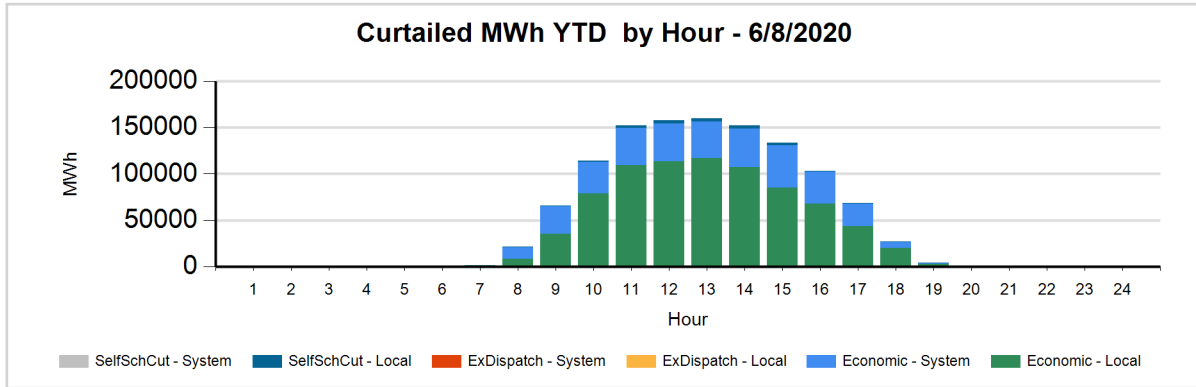
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

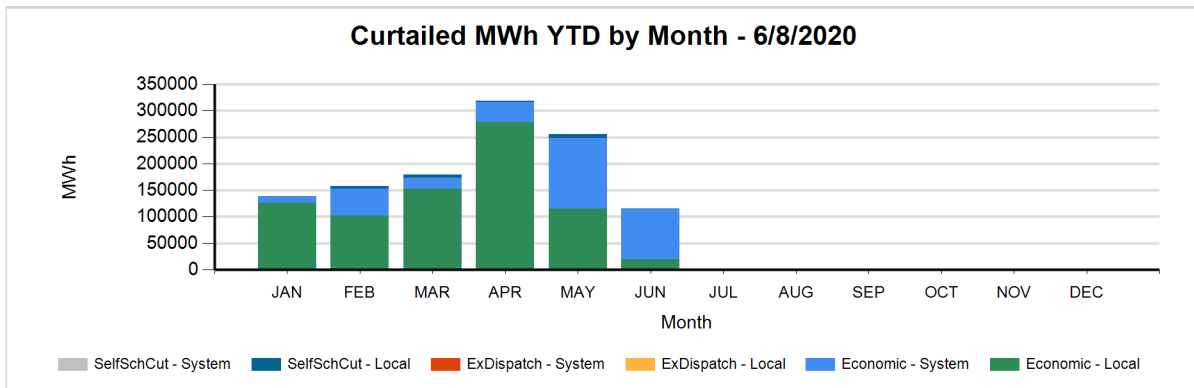
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 6/8/2020
LocalEconomic	792,969
LocalSelfSchCut	20,159
SystemEconomic	350,018
<b>TOTAL</b>	<b>1,163,146</b>

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/08	7	Economic	Local	SOLR	6	18
06/08	8	Economic	Local	SOLR	33	45
06/08	8	Economic	System	SOLR	584	1510
06/08	8	Economic	System	WIND	14	19
06/08	8	SelfSchCut	Local	SOLR	4	8
06/08	9	Economic	Local	SOLR	38	17
06/08	9	Economic	System	SOLR	2147	2717
06/08	9	Economic	System	WIND	42	47
06/08	9	SelfSchCut	Local	SOLR	10	10
06/08	10	Economic	Local	SOLR	265	475
06/08	10	Economic	Local	WIND	4	32
06/08	10	Economic	System	SOLR	2508	2543
06/08	10	Economic	System	WIND	67	87
06/08	10	SelfSchCut	Local	SOLR	11	12
06/08	11	Economic	Local	SOLR	680	516
06/08	11	Economic	Local	WIND	27	19
06/08	11	Economic	System	SOLR	2160	2523
06/08	11	Economic	System	WIND	72	103
06/08	11	SelfSchCut	Local	SOLR	11	11
06/08	12	Economic	Local	SOLR	782	16
06/08	12	Economic	Local	WIND	1	
06/08	12	Economic	System	SOLR	1359	2546
06/08	12	Economic	System	WIND	14	25
06/08	12	SelfSchCut	Local	SOLR	12	11
06/08	13	Economic	Local	SOLR	893	994
06/08	13	Economic	Local	WIND	1	1
06/08	13	Economic	System	SOLR	1258	1495
06/08	13	Economic	System	WIND	13	13
06/08	13	SelfSchCut	Local	SOLR	12	12
06/08	14	Economic	Local	SOLR	819	961
06/08	14	Economic	System	SOLR	903	1418

06/08	14	Economic	System	WIND	11	13
06/08	14	SelfSchCut	Local	SOLR	2	
06/08	15	Economic	Local	SOLR	200	339
06/08	15	Economic	System	SOLR	668	1396
06/08	15	Economic	System	WIND	9	11
06/08	15	SelfSchCut	Local	SOLR	3	
06/08	16	Economic	Local	SOLR	116	76
06/08	16	Economic	Local	WIND	0	
06/08	16	Economic	System	SOLR	1043	1620
06/08	16	Economic	System	WIND	5	11
06/08	16	SelfSchCut	Local	SOLR	6	6
06/08	17	Economic	Local	SOLR	289	31
06/08	17	Economic	Local	WIND	1	
06/08	17	Economic	System	SOLR	1051	2069
06/08	17	Economic	System	WIND	5	5
06/08	17	SelfSchCut	Local	SOLR	10	10
06/08	18	Economic	Local	SOLR	248	79
06/08	18	Economic	Local	WIND	14	
06/08	18	Economic	System	SOLR	275	1182
06/08	18	Economic	System	WIND	3	7
06/08	18	SelfSchCut	Local	SOLR	2	6
06/08	19	Economic	Local	SOLR	25	122
06/08	19	Economic	System	SOLR	0	2
06/08	20	Economic	Local	SOLR	1	3
06/08	21	Economic	Local	WIND	0	2

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).



California ISO