

Wind and Solar Curtailment June 07, 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.

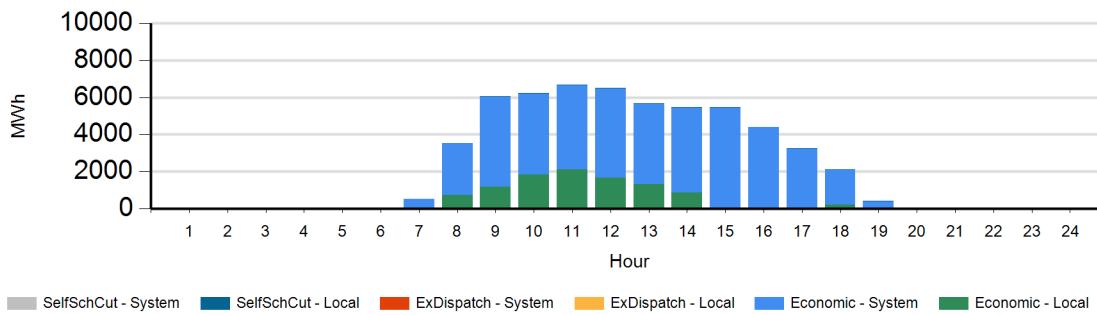
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

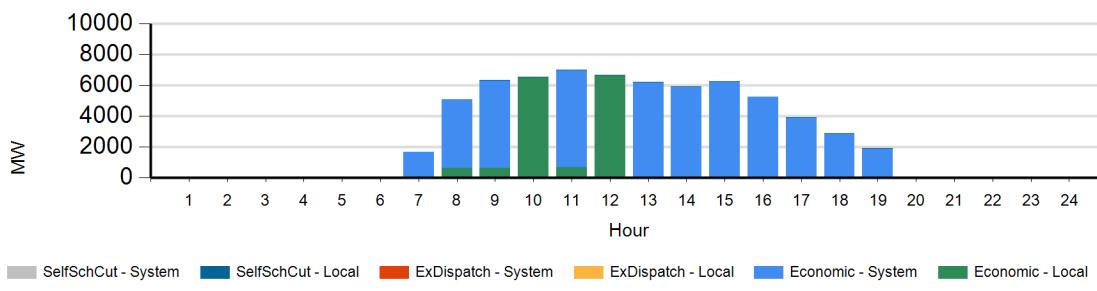
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

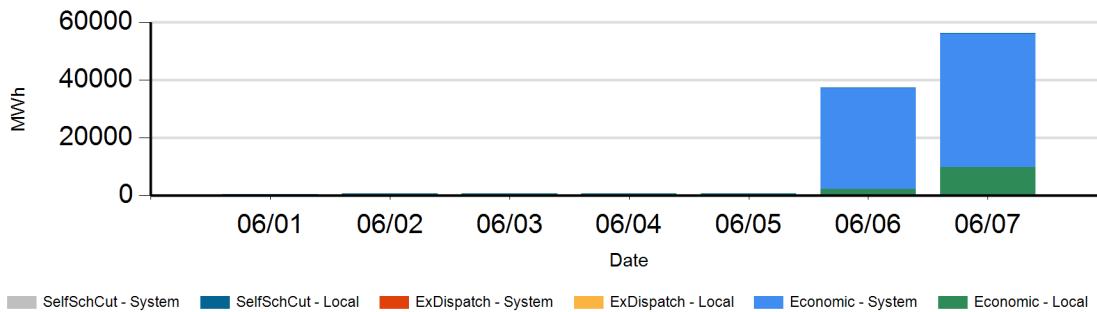
1. Hourly wind/solar generation curtailment energy in MWh. - 6/7/2020



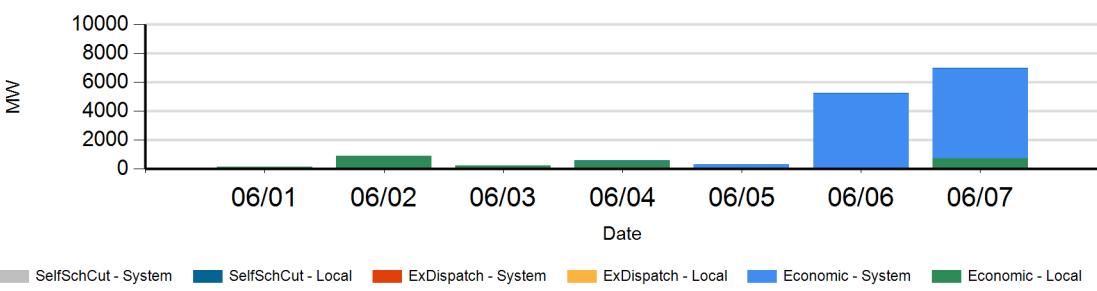
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 6/7/2020



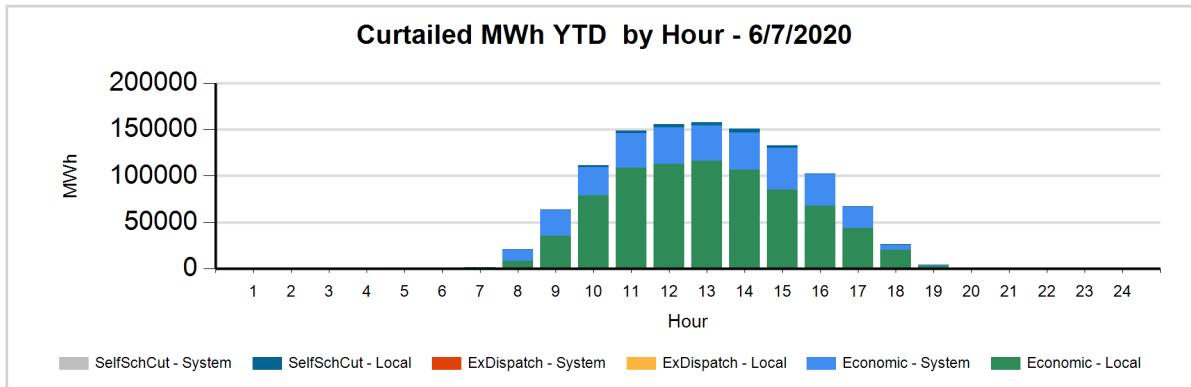
3. Daily wind/solar generation curtailment energy in MWh on a 7-day basis. - 6/7/2020



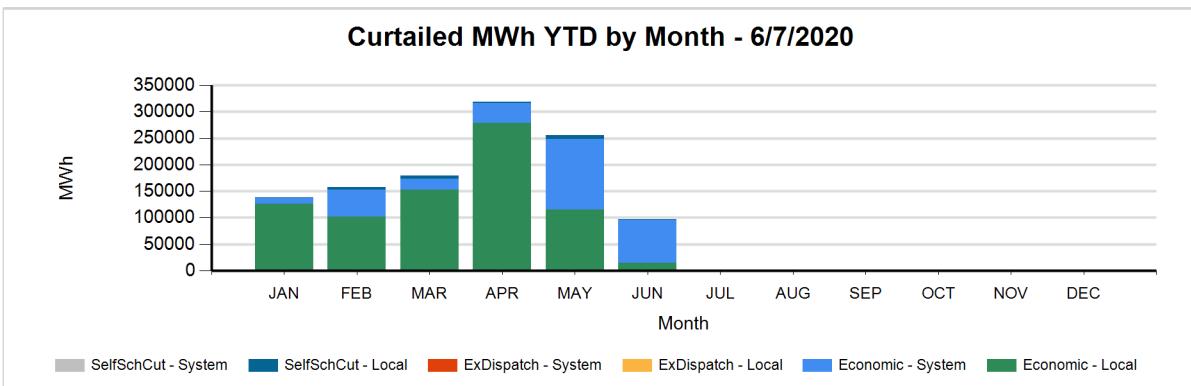
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 6/7/2020



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 - 6/7/2020
LocalEconomic	788,525
LocalSelfSchCut	20,076
SystemEconomic	335,808
TOTAL	1,144,409

Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/07	7	Economic	System	SOLR	499	1638
06/07	7	Economic	System	WIND	24	47
06/07	8	Economic	Local	SOLR	655	546
06/07	8	Economic	Local	WIND	58	55
06/07	8	Economic	System	SOLR	2577	4077
06/07	8	Economic	System	WIND	220	401
06/07	9	Economic	Local	SOLR	1078	569
06/07	9	Economic	Local	WIND	97	59
06/07	9	Economic	System	SOLR	4471	5216
06/07	9	Economic	System	WIND	397	499
06/07	9	SelfSchCut	Local	SOLR	5	7
06/07	10	Economic	Local	SOLR	1696	6077
06/07	10	Economic	Local	WIND	119	457
06/07	10	Economic	System	SOLR	4111	
06/07	10	Economic	System	WIND	291	
06/07	10	SelfSchCut	Local	SOLR	11	11
06/07	11	Economic	Local	SOLR	1999	622
06/07	11	Economic	Local	WIND	92	59
06/07	11	Economic	System	SOLR	4276	5884
06/07	11	Economic	System	WIND	309	416
06/07	11	SelfSchCut	Local	SOLR	11	11
06/07	12	Economic	Local	SOLR	1571	6263
06/07	12	Economic	Local	WIND	82	411
06/07	12	Economic	System	SOLR	4624	
06/07	12	Economic	System	WIND	225	
06/07	12	SelfSchCut	Local	SOLR	12	12
06/07	13	Economic	Local	SOLR	1260	
06/07	13	Economic	Local	WIND	58	
06/07	13	Economic	System	SOLR	4145	5939
06/07	13	Economic	System	WIND	196	259
06/07	13	SelfSchCut	Local	SOLR	13	13

06/07	14	Economic	Local	SOLR	814	
06/07	14	Economic	Local	WIND	41	
06/07	14	Economic	System	SOLR	4375	5671
06/07	14	Economic	System	WIND	208	233
06/07	14	SelfSchCut	Local	SOLR	11	11
06/07	15	Economic	System	SOLR	5191	6000
06/07	15	Economic	System	WIND	281	253
06/07	15	SelfSchCut	Local	SOLR	6	12
06/07	16	Economic	System	SOLR	4116	4966
06/07	16	Economic	System	WIND	260	299
06/07	17	Economic	Local	SOLR	0	
06/07	17	Economic	System	SOLR	3108	3636
06/07	17	Economic	System	WIND	137	274
06/07	17	SelfSchCut	Local	SOLR	9	12
06/07	18	Economic	Local	SOLR	210	
06/07	18	Economic	Local	WIND	8	
06/07	18	Economic	System	SOLR	1807	2644
06/07	18	Economic	System	WIND	77	216
06/07	18	SelfSchCut	Local	SOLR	12	12
06/07	19	Economic	Local	SOLR	11	
06/07	19	Economic	Local	WIND	0	
06/07	19	Economic	System	SOLR	394	1866
06/07	19	Economic	System	WIND	17	49
06/07	19	SelfSchCut	Local	SOLR	3	9
06/07	22	Economic	System	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.

