

Wind and Solar Curtailment June 01, 2023

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.

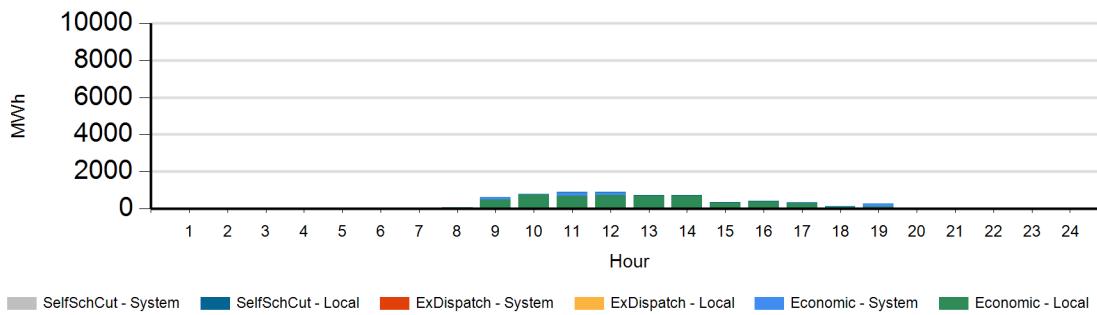
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

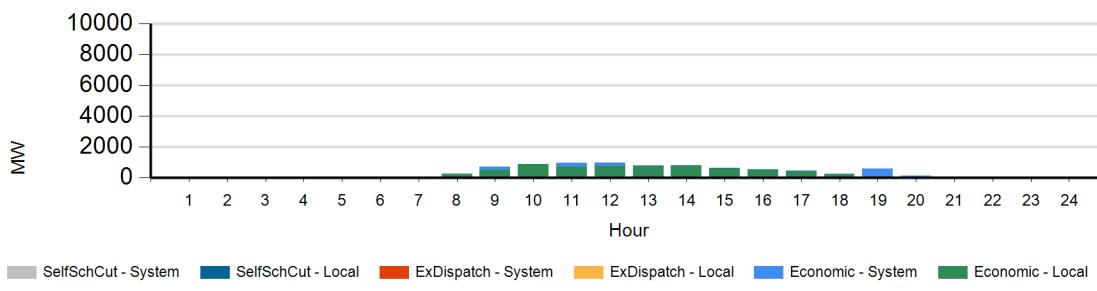
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

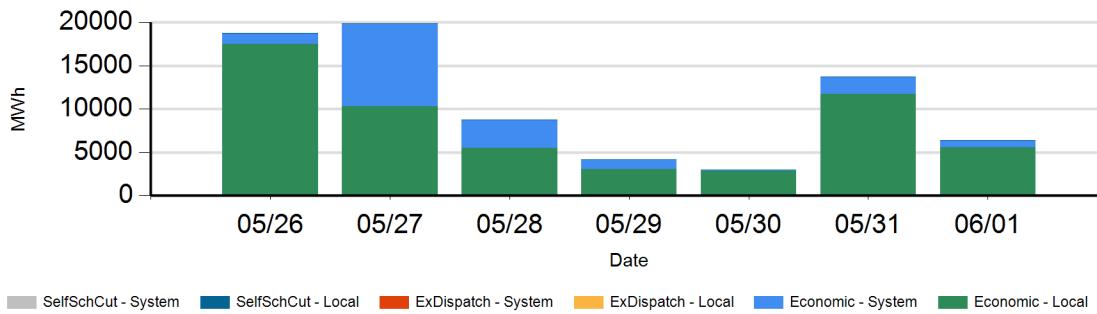
1. Hourly wind/solar generation curtailment energy in MWh. - 6/1/2023



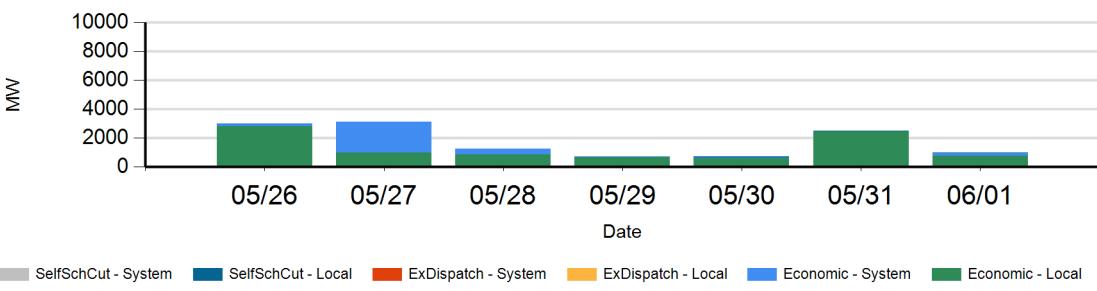
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 6/1/2023



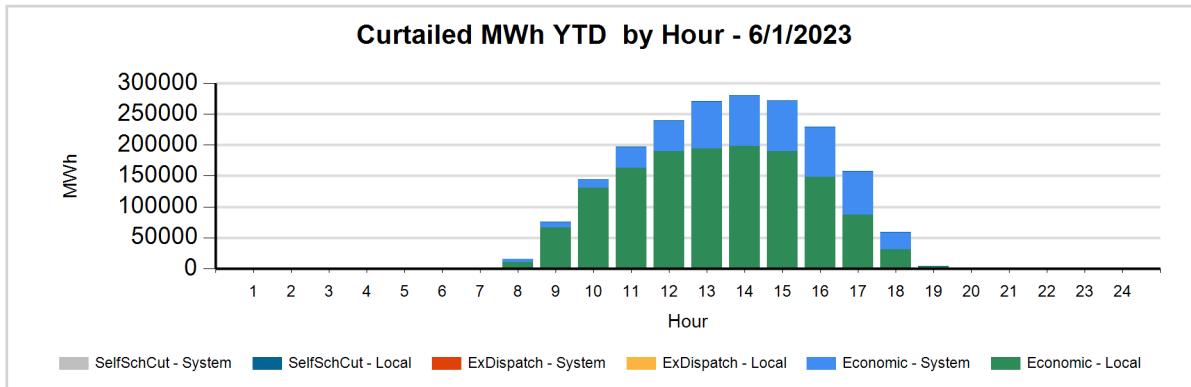
3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 6/1/2023



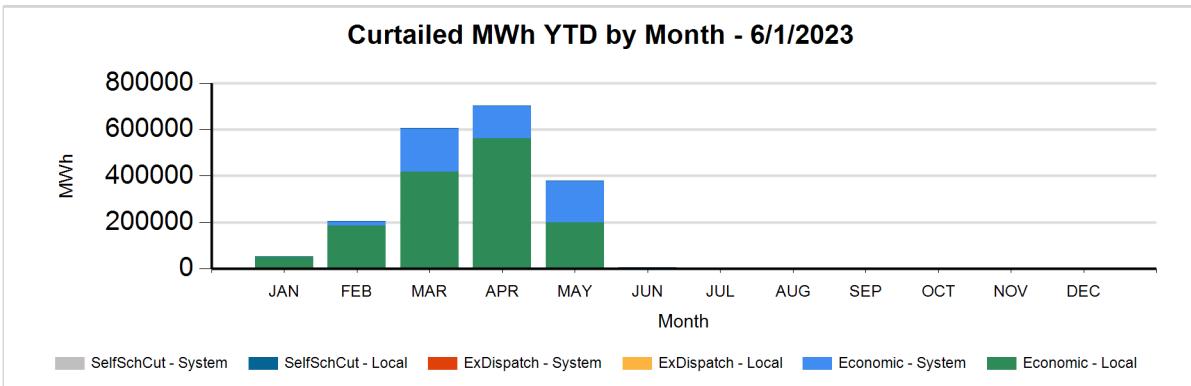
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 6/1/2023



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 - 6/1/2023
LocalEconomic	1,416,357
LocalSelfSchCut	634
SystemEconomic	535,421
TOTAL	1,952,413

Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/01	1	Economic	Local	WIND	7	7
06/01	2	Economic	Local	WIND	7	7
06/01	3	Economic	Local	WIND	6	7
06/01	4	Economic	Local	WIND	6	6
06/01	5	Economic	Local	WIND	6	6
06/01	6	Economic	Local	WIND	6	6
06/01	7	Economic	Local	SOLR	3	35
06/01	7	Economic	Local	WIND	5	6
06/01	7	Economic	System	SOLR	1	
06/01	8	Economic	Local	SOLR	73	256
06/01	8	Economic	Local	WIND	7	8
06/01	9	Economic	Local	SOLR	427	472
06/01	9	Economic	Local	WIND	57	4
06/01	9	Economic	System	SOLR	98	217
06/01	9	Economic	System	WIND	27	29
06/01	10	Economic	Local	SOLR	702	808
06/01	10	Economic	Local	WIND	69	69
06/01	10	Economic	System	SOLR	19	
06/01	10	Economic	System	WIND	7	
06/01	10	SelfSchCut	Local	SOLR	0	
06/01	11	Economic	Local	SOLR	690	686
06/01	11	Economic	Local	WIND	10	3
06/01	11	Economic	System	SOLR	166	224
06/01	11	Economic	System	WIND	26	32
06/01	11	SelfSchCut	Local	SOLR	3	
06/01	12	Economic	Local	SOLR	731	728
06/01	12	Economic	Local	WIND	2	
06/01	12	Economic	System	SOLR	164	218
06/01	12	Economic	System	WIND	11	19
06/01	12	SelfSchCut	Local	SOLR	1	2
06/01	13	Economic	Local	SOLR	713	793

06/01	13	Economic	System	SOLR	2	4
06/01	13	SelfSchCut	Local	SOLR	2	
06/01	14	Economic	Local	SOLR	720	782
06/01	14	Economic	System	SOLR	4	4
06/01	14	SelfSchCut	Local	SOLR	1	1
06/01	15	Economic	Local	SOLR	330	620
06/01	15	Economic	Local	WIND	1	
06/01	15	Economic	System	SOLR	6	4
06/01	15	SelfSchCut	Local	SOLR	1	2
06/01	16	Economic	Local	SOLR	404	514
06/01	16	Economic	Local	WIND	10	7
06/01	16	Economic	System	SOLR	7	6
06/01	16	SelfSchCut	Local	SOLR	1	
06/01	17	Economic	Local	SOLR	300	436
06/01	17	Economic	Local	WIND	14	14
06/01	17	Economic	System	SOLR	13	4
06/01	18	Economic	Local	SOLR	116	231
06/01	18	Economic	Local	WIND	6	
06/01	18	Economic	System	SOLR	9	17
06/01	18	Economic	System	WIND	7	13
06/01	19	Economic	Local	SOLR	63	52
06/01	19	Economic	Local	WIND	37	13
06/01	19	Economic	System	SOLR	99	358
06/01	19	Economic	System	WIND	72	143
06/01	20	Economic	Local	WIND	10	11
06/01	20	Economic	System	SOLR	6	28
06/01	20	Economic	System	WIND	16	85
06/01	21	Economic	Local	WIND	8	9
06/01	22	Economic	Local	WIND	8	8
06/01	23	Economic	Local	WIND	8	8
06/01	23	Economic	System	WIND	3	37
06/01	24	Economic	Local	WIND	7	8

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.

