

Wind and Solar Curtailment June 06, 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.

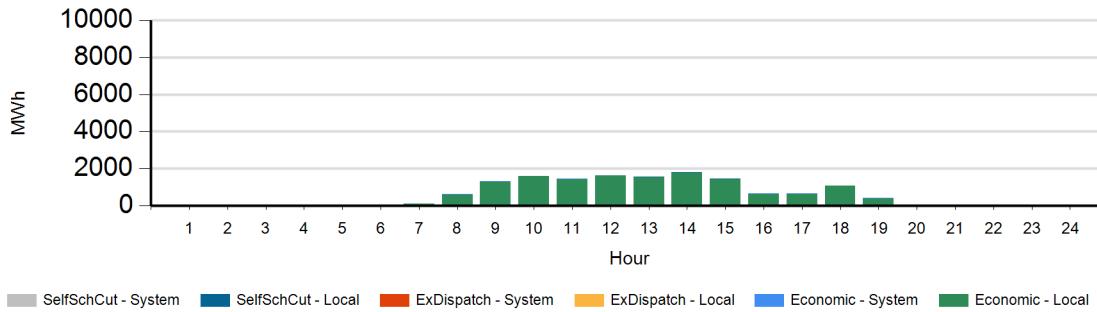
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

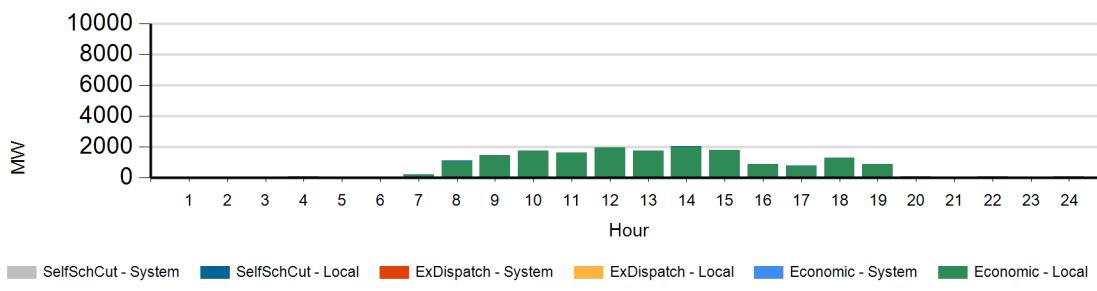
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

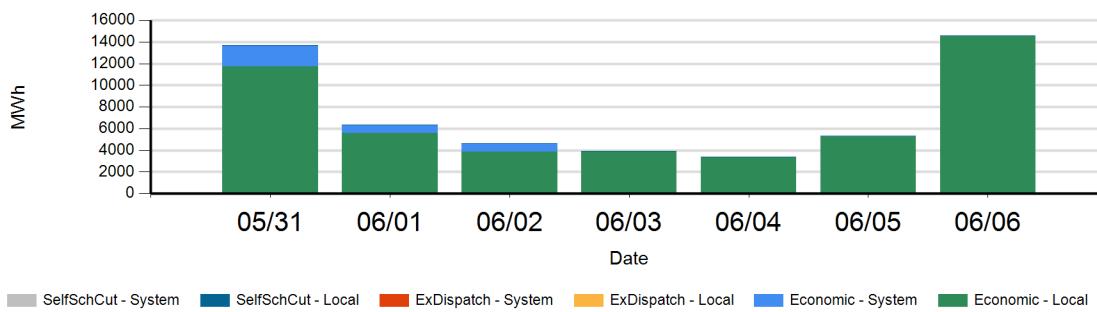
1. Hourly wind/solar generation curtailment energy in MWh. - 6/6/2023



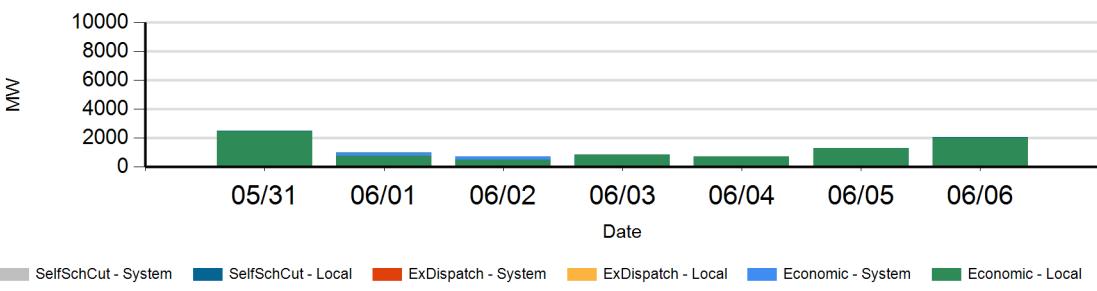
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 6/6/2023



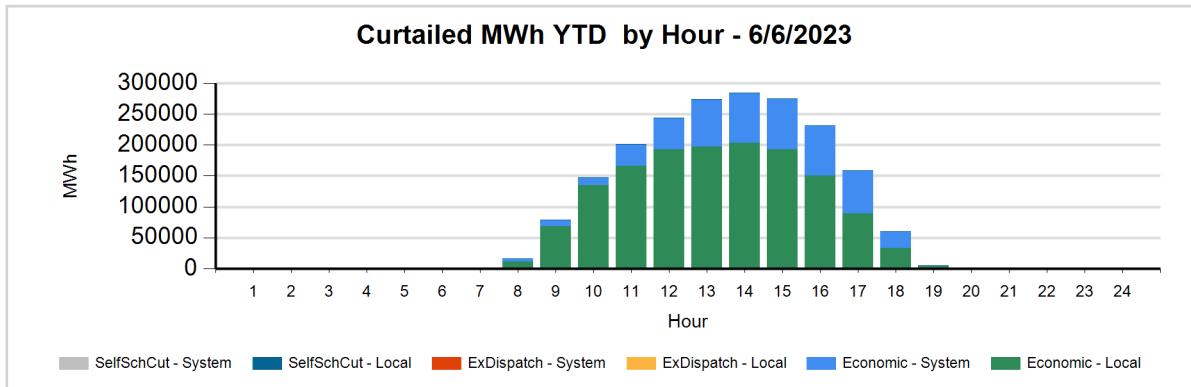
3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 6/6/2023



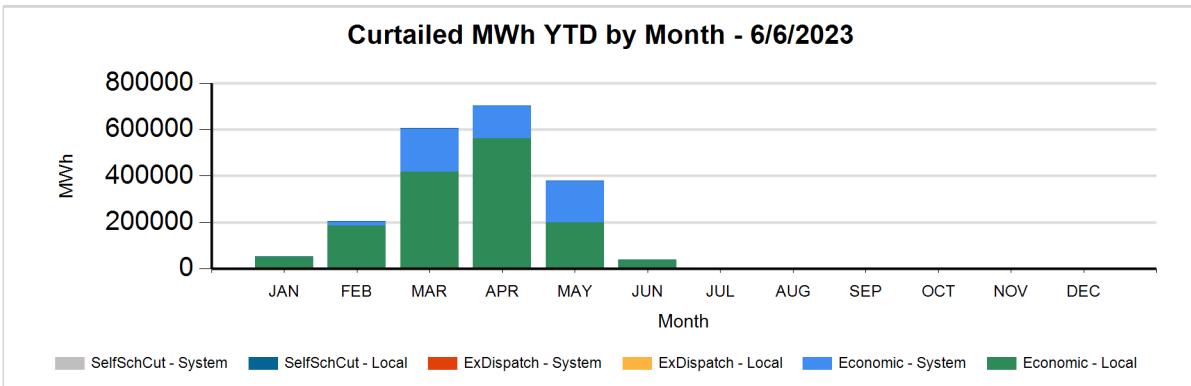
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 6/6/2023



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 - 6/6/2023
LocalEconomic	1,447,354
LocalSelfSchCut	657
SystemEconomic	536,220
TOTAL	1,984,230

Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/06	1	Economic	Local	WIND	18	19
06/06	2	Economic	Local	WIND	18	19
06/06	3	Economic	Local	WIND	16	19
06/06	4	Economic	Local	WIND	37	70
06/06	5	Economic	Local	WIND	21	31
06/06	6	Economic	Local	SOLR	1	8
06/06	6	Economic	Local	WIND	18	17
06/06	7	Economic	Local	SOLR	47	99
06/06	7	Economic	Local	WIND	39	119
06/06	8	Economic	Local	SOLR	440	898
06/06	8	Economic	Local	WIND	189	213
06/06	8	Economic	System	SOLR	3	
06/06	8	Economic	System	WIND	1	15
06/06	9	Economic	Local	SOLR	1048	1115
06/06	9	Economic	Local	WIND	278	345
06/06	9	Economic	System	SOLR	0	
06/06	9	Economic	System	WIND	1	
06/06	9	SelfSchCut	Local	SOLR	0	
06/06	10	Economic	Local	SOLR	1305	1342
06/06	10	Economic	Local	WIND	277	410
06/06	11	Economic	Local	SOLR	1092	1221
06/06	11	Economic	Local	WIND	343	387
06/06	11	Economic	System	SOLR	1	
06/06	12	Economic	Local	SOLR	1379	1568
06/06	12	Economic	Local	WIND	250	405
06/06	12	SelfSchCut	Local	SOLR	0	
06/06	13	Economic	Local	SOLR	1196	1305
06/06	13	Economic	Local	WIND	340	441
06/06	13	SelfSchCut	Local	SOLR	1	
06/06	14	Economic	Local	SOLR	1393	1570
06/06	14	Economic	Local	WIND	403	458

06/06	14	SelfSchCut	Local	SOLR	1	4
06/06	15	Economic	Local	SOLR	1059	1302
06/06	15	Economic	Local	WIND	396	472
06/06	15	Economic	System	SOLR	8	
06/06	15	SelfSchCut	Local	SOLR	2	
06/06	16	Economic	Local	SOLR	502	674
06/06	16	Economic	Local	WIND	151	192
06/06	16	Economic	System	SOLR	2	
06/06	16	SelfSchCut	Local	SOLR	0	
06/06	17	Economic	Local	SOLR	497	598
06/06	17	Economic	Local	WIND	156	196
06/06	17	Economic	System	SOLR	5	10
06/06	18	Economic	Local	SOLR	702	813
06/06	18	Economic	Local	WIND	358	456
06/06	19	Economic	Local	SOLR	327	622
06/06	19	Economic	Local	WIND	98	263
06/06	19	Economic	System	WIND	1	
06/06	20	Economic	Local	SOLR	23	65
06/06	20	Economic	Local	WIND	20	20
06/06	20	Economic	System	SOLR	0	
06/06	21	Economic	Local	WIND	24	56
06/06	22	Economic	Local	WIND	24	65
06/06	23	Economic	Local	WIND	19	19
06/06	24	Economic	Local	WIND	22	73

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.

