

Wind and Solar Curtailment June 28, 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.

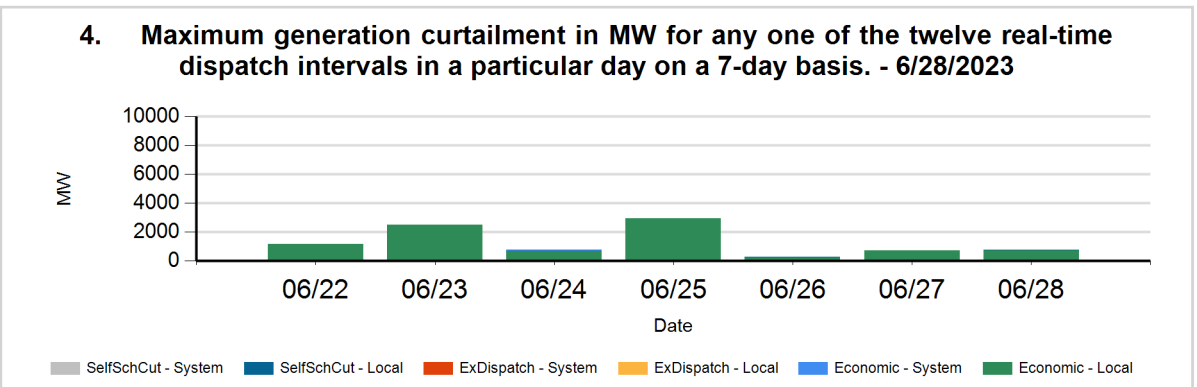
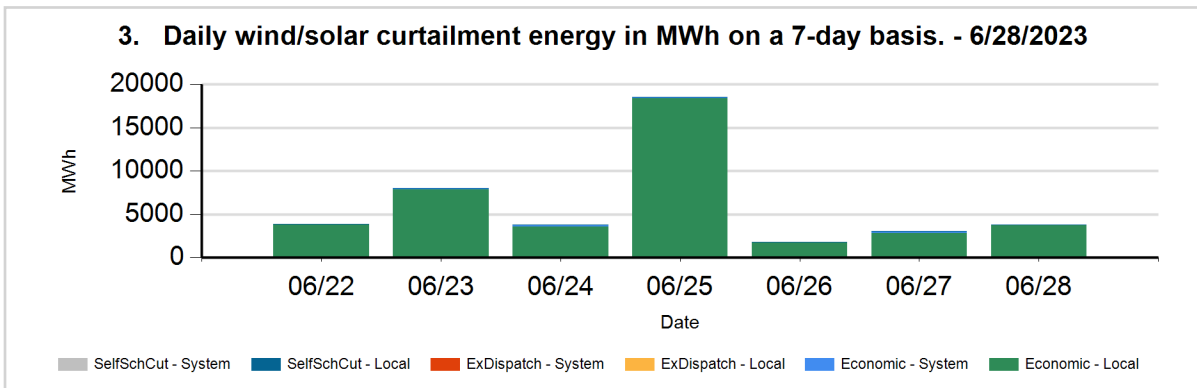
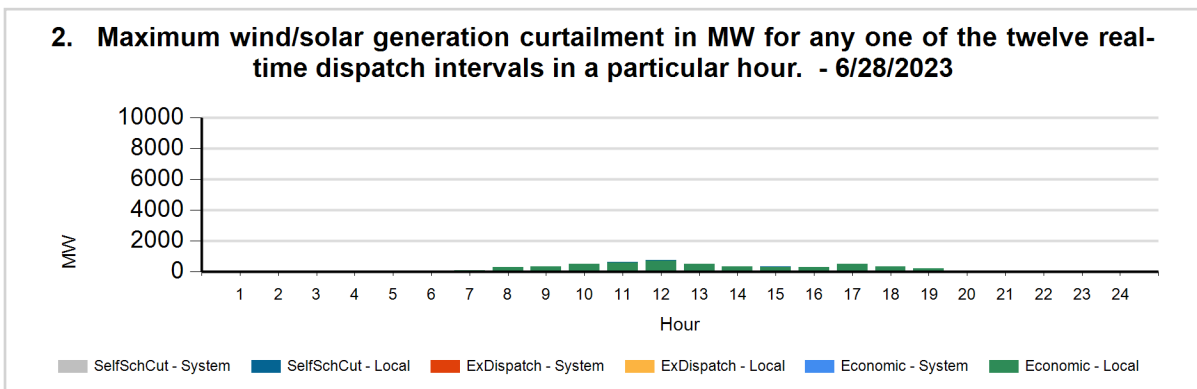
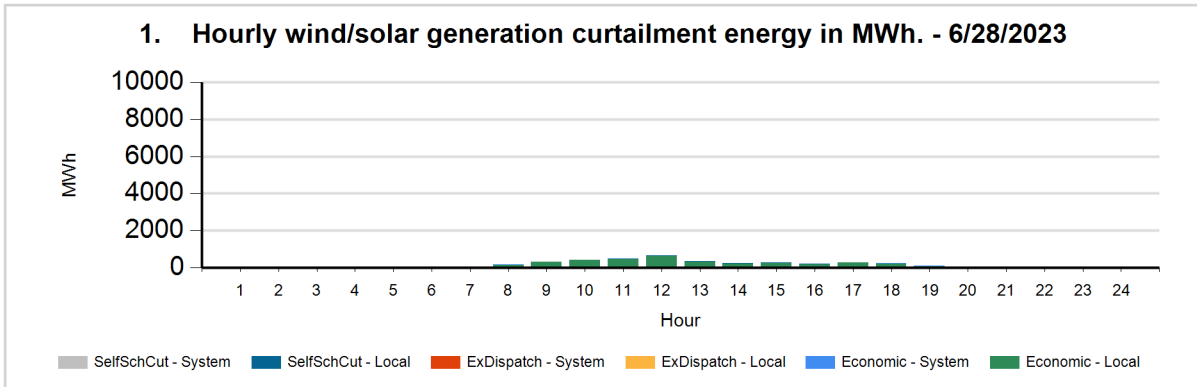
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

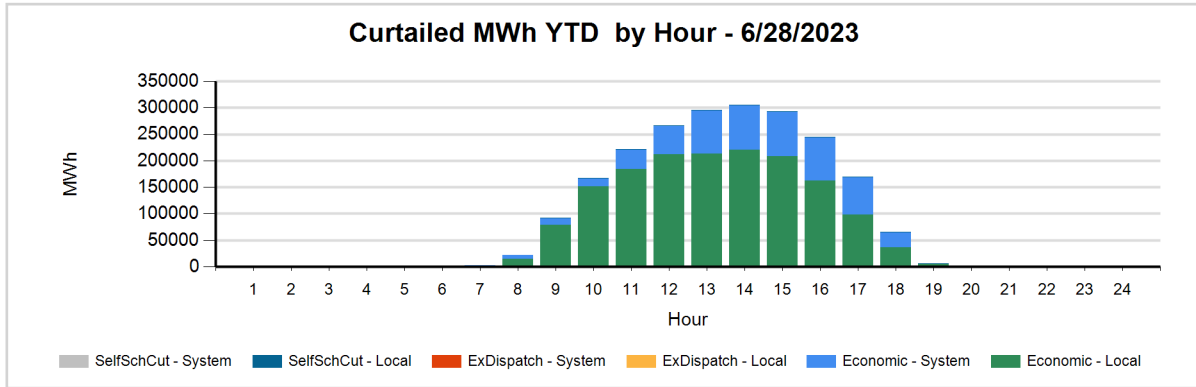
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

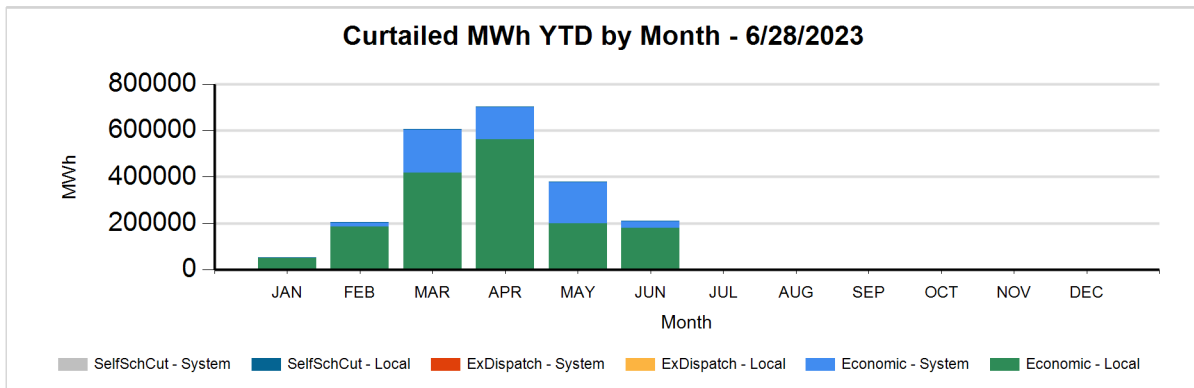
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 6/28/2023
LocalEconomic	1,590,044
LocalSelfSchCut	856
SystemEconomic	564,340
TOTAL	2,155,239

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/28	1	Economic	Local	WIND	6	6
06/28	2	Economic	Local	WIND	6	6
06/28	3	Economic	Local	WIND	5	5
06/28	4	Economic	Local	WIND	6	6
06/28	5	Economic	Local	WIND	6	6
06/28	6	Economic	Local	WIND	6	6
06/28	7	Economic	Local	SOLR	6	57
06/28	7	Economic	Local	WIND	6	6
06/28	7	Economic	System	SOLR	9	
06/28	8	Economic	Local	SOLR	16	10
06/28	8	Economic	Local	WIND	158	288
06/28	8	Economic	System	SOLR	3	
06/28	9	Economic	Local	SOLR	147	153
06/28	9	Economic	Local	WIND	146	188
06/28	10	Economic	Local	SOLR	241	319
06/28	10	Economic	Local	WIND	157	195
06/28	11	Economic	Local	SOLR	303	403
06/28	11	Economic	Local	WIND	169	199
06/28	11	Economic	System	WIND	1	11
06/28	11	SelfSchCut	Local	SOLR	1	5
06/28	12	Economic	Local	SOLR	452	522
06/28	12	Economic	Local	WIND	215	223
06/28	12	SelfSchCut	Local	SOLR	3	5
06/28	13	Economic	Local	SOLR	254	306
06/28	13	Economic	Local	WIND	96	189
06/28	13	SelfSchCut	Local	SOLR	2	
06/28	14	Economic	Local	SOLR	204	230
06/28	14	Economic	Local	WIND	37	92
06/28	14	SelfSchCut	Local	SOLR	1	
06/28	15	Economic	Local	SOLR	204	214
06/28	15	Economic	Local	WIND	47	119

06/28	15	SelfSchCut	Local	SOLR	5	4
06/28	16	Economic	Local	SOLR	142	116
06/28	16	Economic	Local	WIND	65	180
06/28	16	SelfSchCut	Local	SOLR	1	
06/28	17	Economic	Local	SOLR	146	171
06/28	17	Economic	Local	WIND	137	310
06/28	18	Economic	Local	SOLR	210	282
06/28	18	Economic	Local	WIND	24	44
06/28	18	Economic	System	SOLR	2	
06/28	19	Economic	Local	SOLR	61	211
06/28	19	Economic	Local	WIND	12	1
06/28	19	Economic	System	SOLR	10	
06/28	20	Economic	Local	WIND	12	12
06/28	20	Economic	System	SOLR	1	10
06/28	20	Economic	System	WIND	3	30
06/28	21	Economic	Local	WIND	11	11
06/28	22	Economic	Local	WIND	11	11
06/28	23	Economic	Local	WIND	10	11
06/28	24	Economic	Local	WIND	9	10

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.