

Wind and Solar Curtailment April 15, 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.

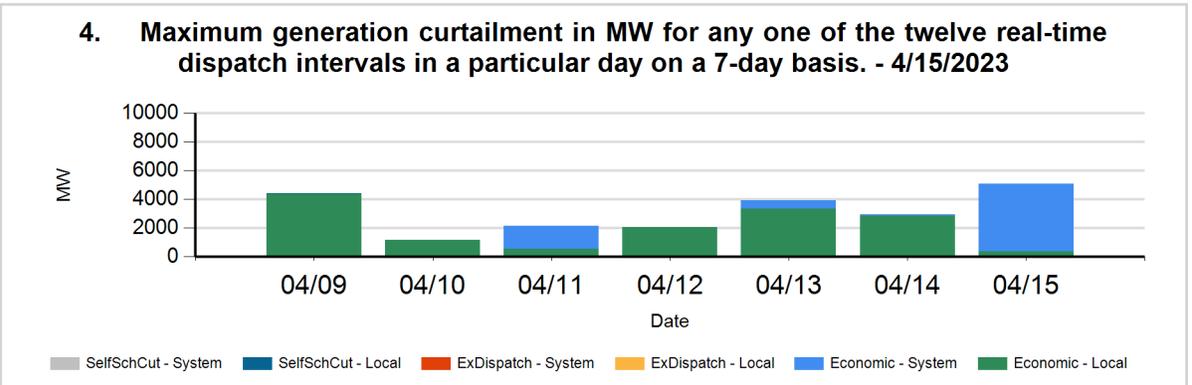
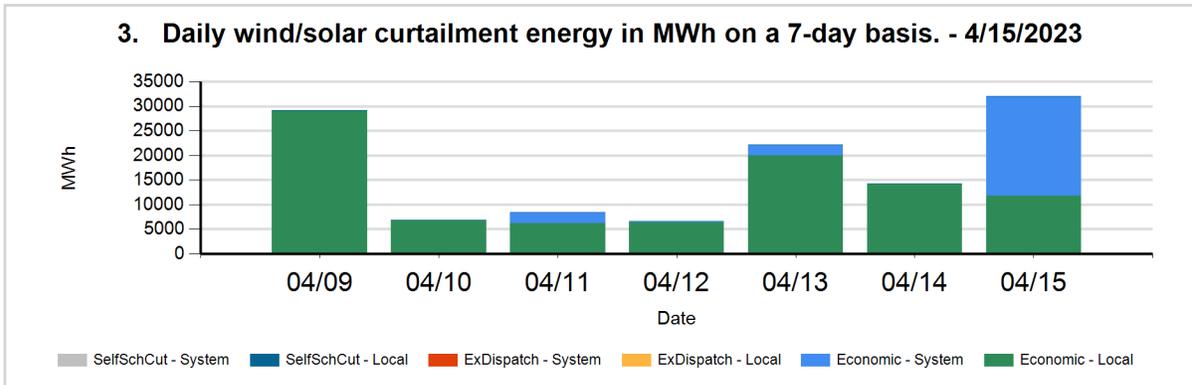
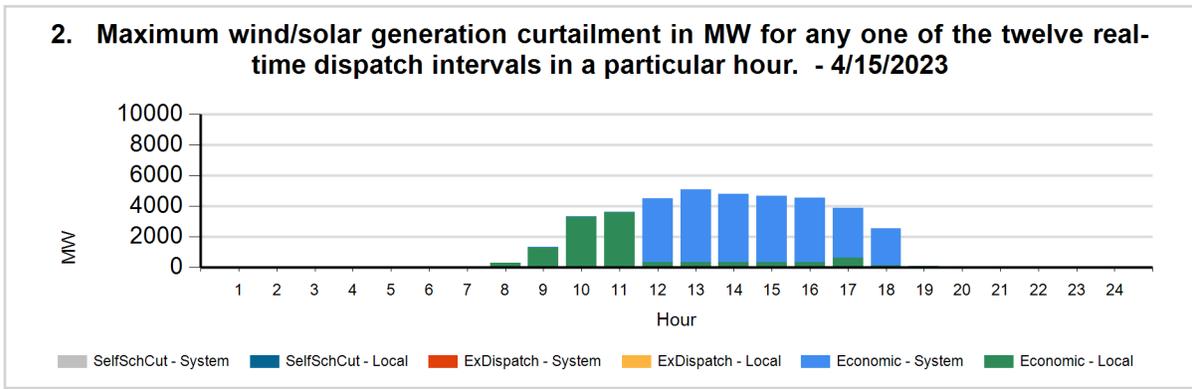
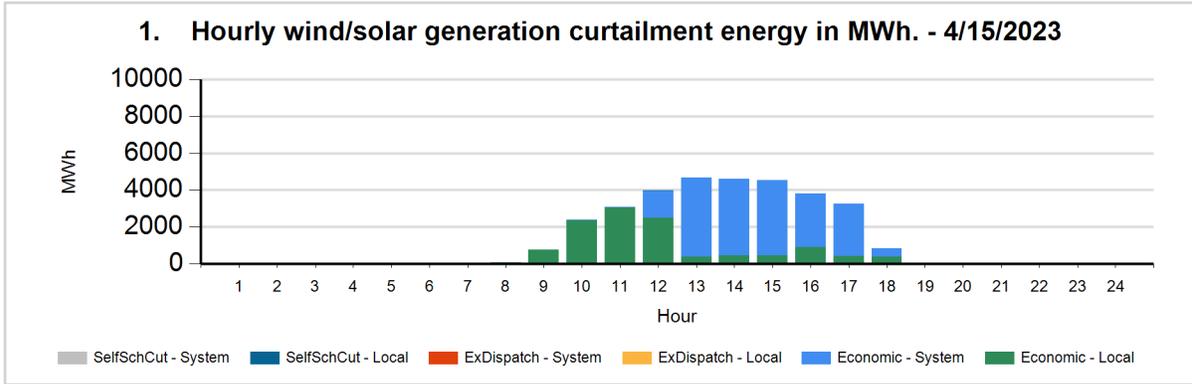
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

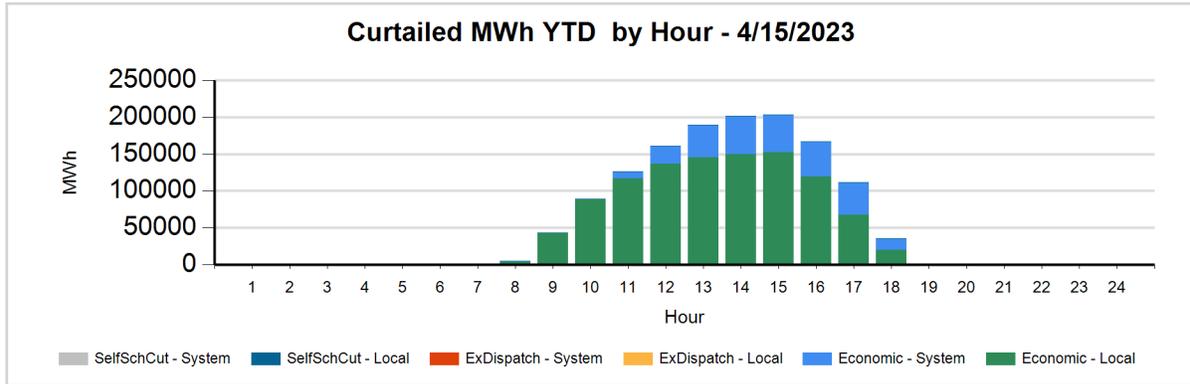
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

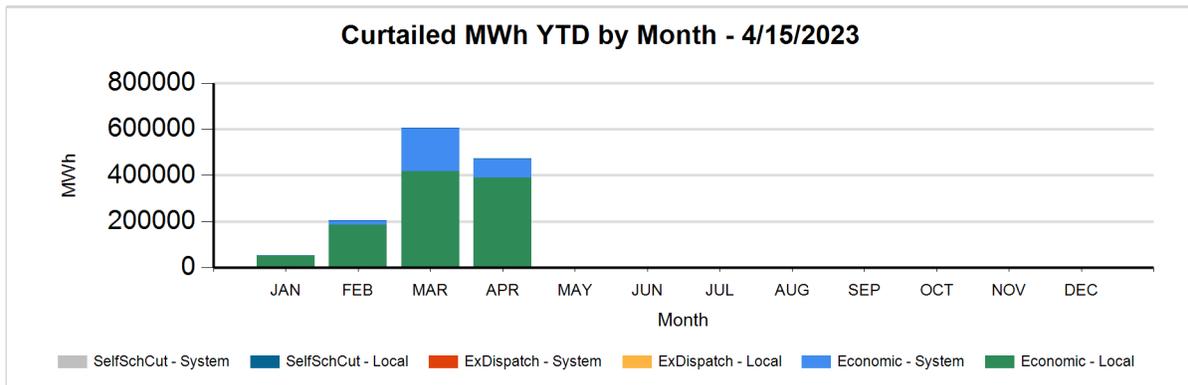
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/15/2023
LocalEconomic	1,042,247
LocalSelfSchCut	210
SystemEconomic	294,493
TOTAL	1,336,950

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/15	1	Economic	Local	WIND	7	7
04/15	2	Economic	Local	WIND	6	7
04/15	3	Economic	Local	WIND	2	4
04/15	4	Economic	Local	WIND	2	3
04/15	5	Economic	Local	WIND	2	5
04/15	6	Economic	Local	WIND	3	6
04/15	7	Economic	Local	WIND	4	6
04/15	8	Economic	Local	SOLR	68	298
04/15	8	Economic	Local	WIND	6	8
04/15	9	Economic	Local	SOLR	743	1324
04/15	9	Economic	Local	WIND	8	13
04/15	9	Economic	System	WIND	0	2
04/15	10	Economic	Local	SOLR	2376	3315
04/15	10	Economic	Local	WIND	23	20
04/15	10	Economic	System	WIND	2	14
04/15	11	Economic	Local	SOLR	3034	3567
04/15	11	Economic	Local	WIND	28	28
04/15	11	Economic	System	SOLR	11	
04/15	11	Economic	System	WIND	6	13
04/15	11	SelfSchCut	Local	SOLR	0	
04/15	12	Economic	Local	SOLR	2445	339
04/15	12	Economic	Local	WIND	35	
04/15	12	Economic	System	SOLR	1400	3962
04/15	12	Economic	System	WIND	82	194
04/15	12	SelfSchCut	Local	SOLR	3	
04/15	13	Economic	Local	SOLR	385	332
04/15	13	Economic	System	SOLR	4091	4538
04/15	13	Economic	System	WIND	195	209
04/15	14	Economic	Local	SOLR	429	337
04/15	14	Economic	System	SOLR	3990	4271
04/15	14	Economic	System	WIND	175	172

04/15	15	Economic	Local	SOLR	433	335
04/15	15	Economic	System	SOLR	3942	4170
04/15	15	Economic	System	WIND	160	159
04/15	16	Economic	Local	SOLR	902	318
04/15	16	Economic	Local	WIND	9	
04/15	16	Economic	System	SOLR	2809	4052
04/15	16	Economic	System	WIND	85	157
04/15	16	SelfSchCut	Local	SOLR	0	
04/15	17	Economic	Local	SOLR	396	607
04/15	17	Economic	System	SOLR	2807	3182
04/15	17	Economic	System	WIND	64	78
04/15	18	Economic	Local	SOLR	375	119
04/15	18	Economic	Local	WIND	4	
04/15	18	Economic	System	SOLR	444	2396
04/15	18	Economic	System	WIND	14	43
04/15	19	Economic	Local	SOLR	17	99
04/15	21	Economic	Local	WIND	0	4
04/15	22	Economic	Local	WIND	3	6
04/15	23	Economic	Local	WIND	3	7
04/15	24	Economic	Local	WIND	1	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.