

Wind and Solar Curtailment May 13, 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.

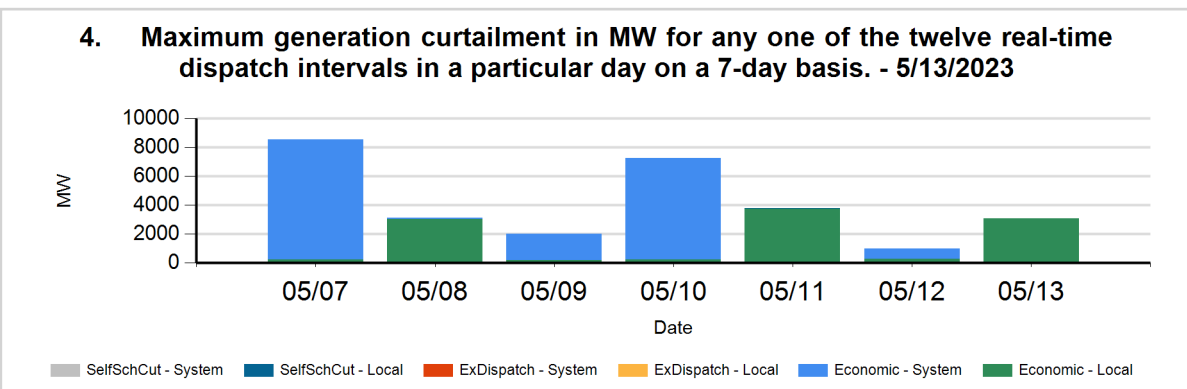
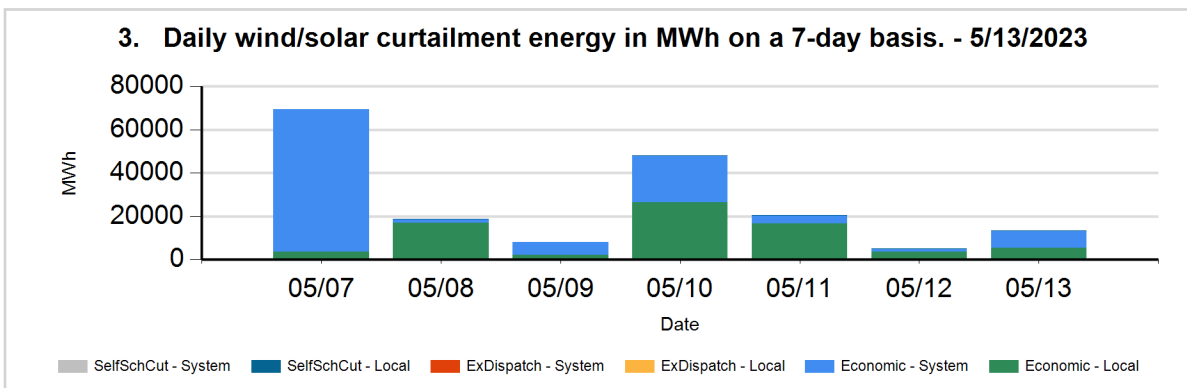
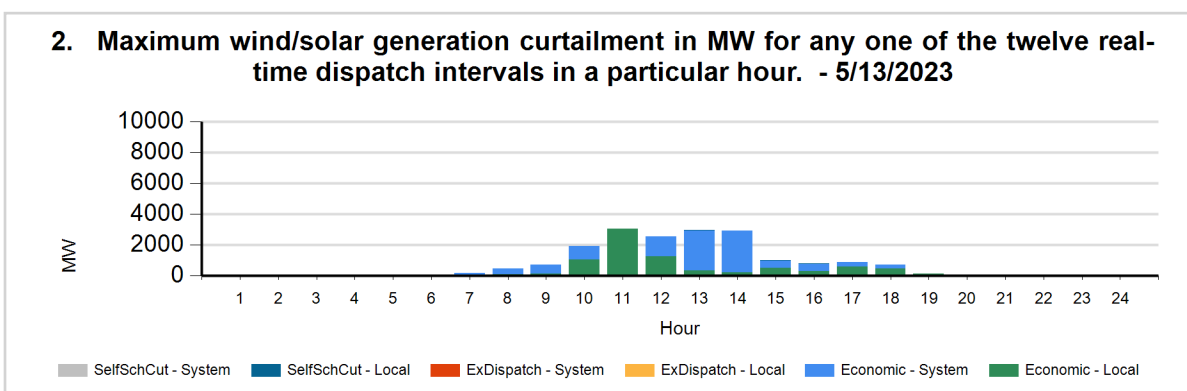
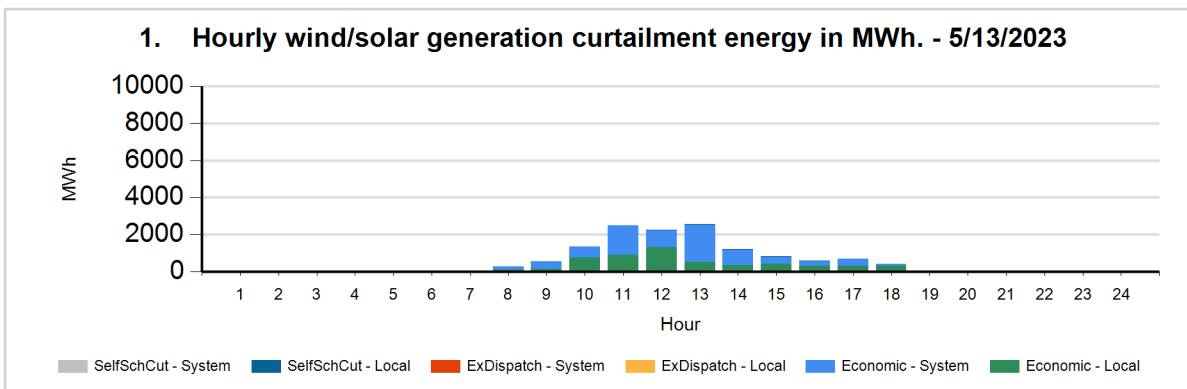
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

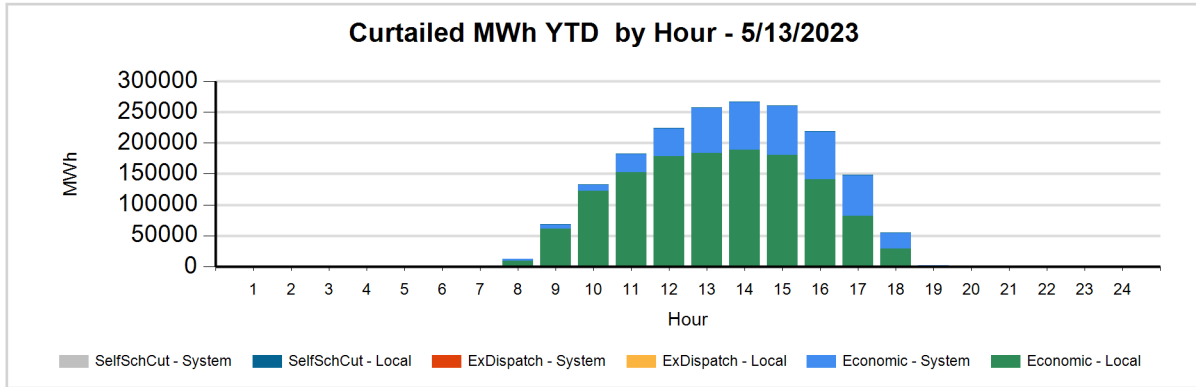
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

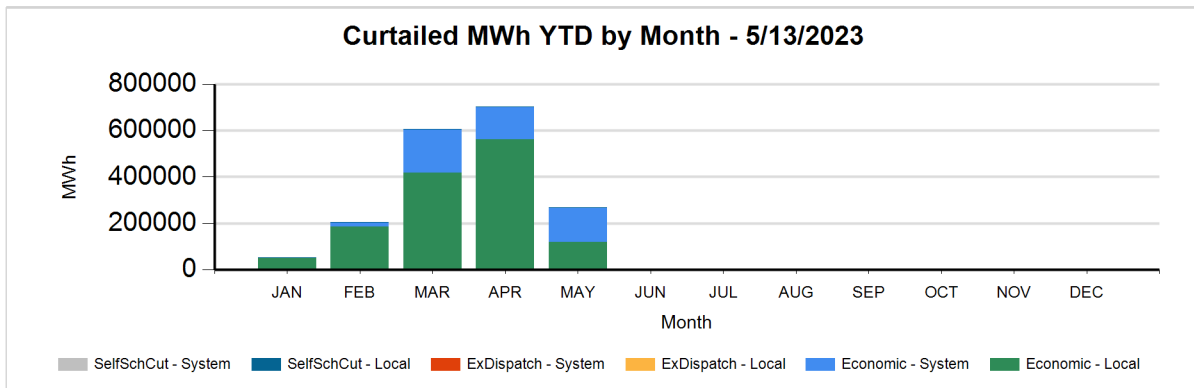
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/13/2023
LocalEconomic	1,332,046
LocalSelfSchCut	473
SystemEconomic	501,941
TOTAL	1,834,459

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/13	7	Economic	System	SOLR	30	129
05/13	7	Economic	System	WIND	12	46
05/13	8	Economic	Local	SOLR	94	72
05/13	8	Economic	Local	WIND	4	
05/13	8	Economic	System	SOLR	156	360
05/13	8	Economic	System	WIND	20	31
05/13	9	Economic	Local	SOLR	120	106
05/13	9	Economic	Local	WIND	2	
05/13	9	Economic	System	SOLR	375	552
05/13	9	Economic	System	WIND	39	52
05/13	10	Economic	Local	SOLR	706	948
05/13	10	Economic	Local	WIND	59	75
05/13	10	Economic	System	SOLR	582	889
05/13	10	Economic	System	WIND	8	2
05/13	11	Economic	Local	SOLR	889	3004
05/13	11	Economic	Local	WIND	11	47
05/13	11	Economic	System	SOLR	1531	
05/13	11	Economic	System	WIND	53	
05/13	12	Economic	Local	SOLR	1307	1228
05/13	12	Economic	Local	WIND	22	13
05/13	12	Economic	System	SOLR	902	1291
05/13	12	Economic	System	WIND	10	11
05/13	12	SelfSchCut	Local	SOLR	1	
05/13	13	Economic	Local	SOLR	530	347
05/13	13	Economic	Local	WIND	2	
05/13	13	Economic	System	SOLR	2007	2547
05/13	13	Economic	System	WIND	27	66
05/13	13	SelfSchCut	Local	SOLR	2	3
05/13	14	Economic	Local	SOLR	333	200
05/13	14	Economic	Local	WIND	1	
05/13	14	Economic	System	SOLR	824	2627

05/13	14	Economic	System	WIND	30	80
05/13	14	SelfSchCut	Local	SOLR	14	
05/13	15	Economic	Local	SOLR	415	513
05/13	15	Economic	System	SOLR	371	401
05/13	15	Economic	System	WIND	39	55
05/13	15	SelfSchCut	Local	SOLR	12	14
05/13	16	Economic	Local	SOLR	314	308
05/13	16	Economic	Local	WIND	10	
05/13	16	Economic	System	SOLR	212	396
05/13	16	Economic	System	WIND	44	90
05/13	16	SelfSchCut	Local	SOLR	3	7
05/13	17	Economic	Local	SOLR	272	501
05/13	17	Economic	Local	WIND	32	79
05/13	17	Economic	System	SOLR	284	230
05/13	17	Economic	System	WIND	84	53
05/13	18	Economic	Local	SOLR	276	319
05/13	18	Economic	Local	WIND	44	120
05/13	18	Economic	System	SOLR	66	229
05/13	18	Economic	System	WIND	27	48
05/13	19	Economic	Local	SOLR	38	108
05/13	19	Economic	System	SOLR	6	

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.