

Wind and Solar Curtailment May 24, 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.

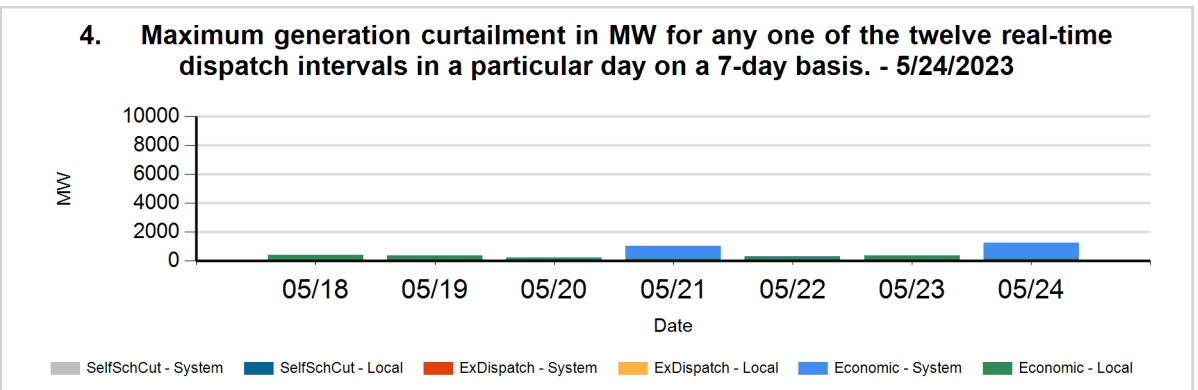
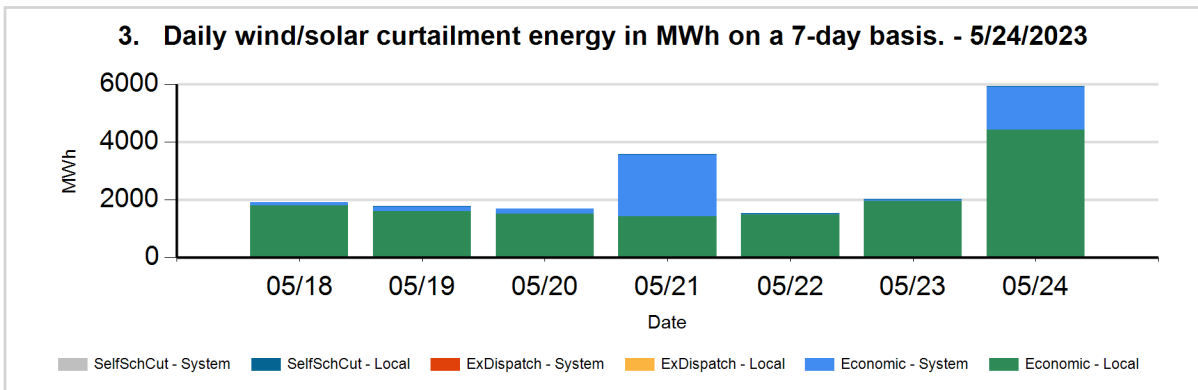
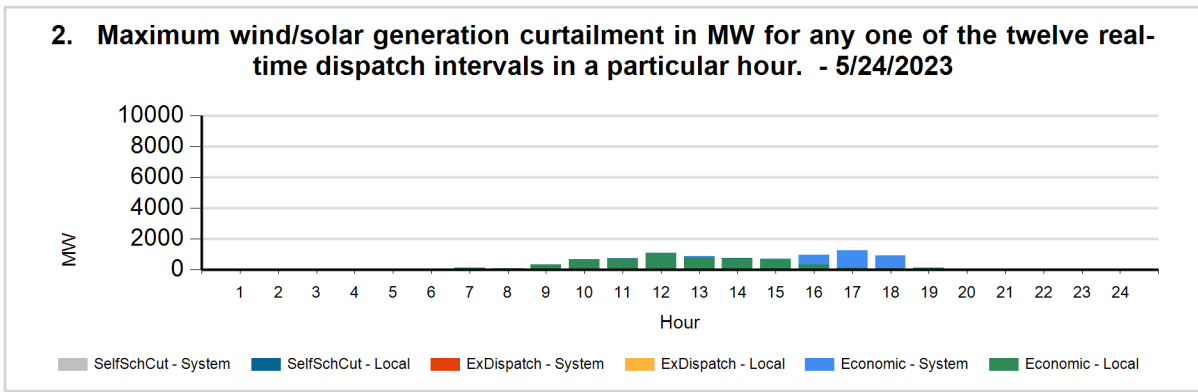
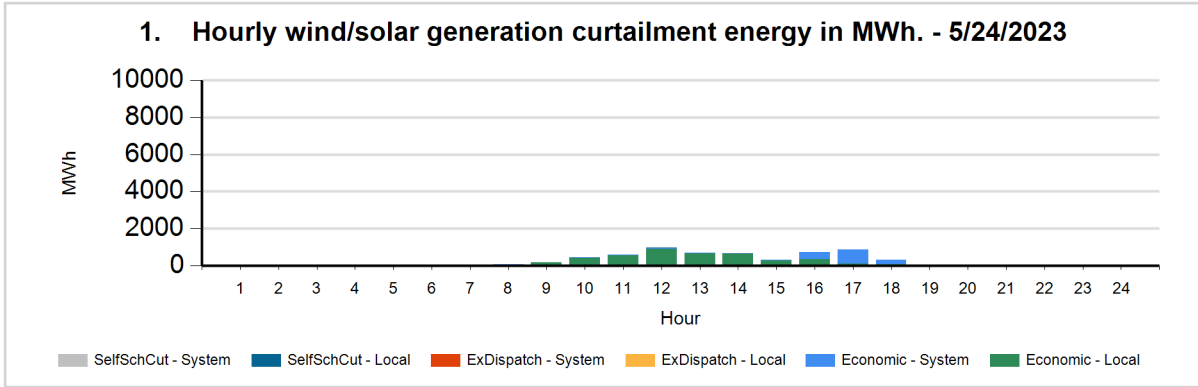
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

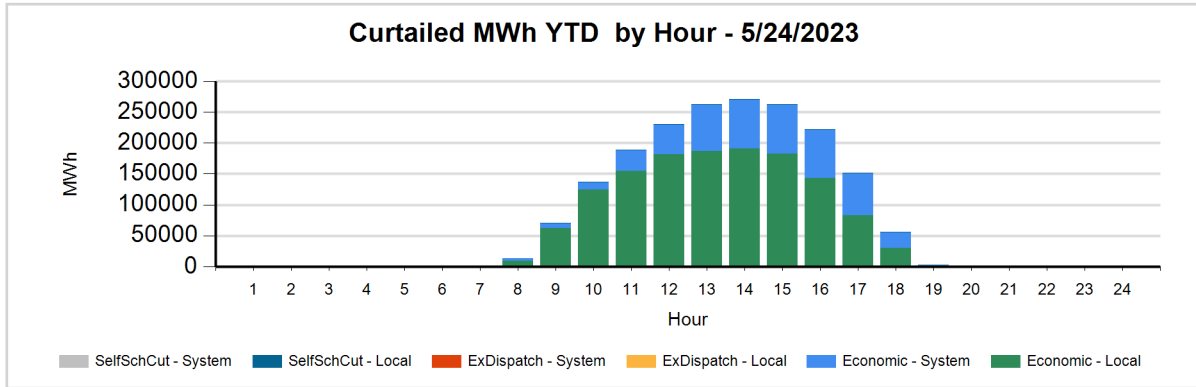
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

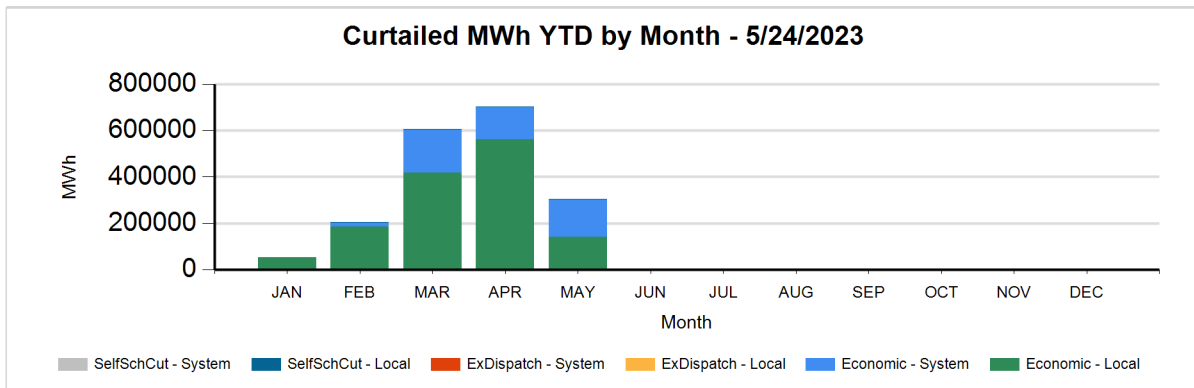
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/24/2023
LocalEconomic	1,354,696
LocalSelfSchCut	515
SystemEconomic	516,050
TOTAL	1,871,261

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/24	1	Economic	Local	WIND	5	9
05/24	2	Economic	Local	WIND	4	9
05/24	3	Economic	Local	WIND	4	9
05/24	4	Economic	Local	WIND	4	9
05/24	5	Economic	Local	WIND	4	9
05/24	6	Economic	Local	WIND	7	9
05/24	6	Economic	System	WIND	1	7
05/24	7	Economic	Local	SOLR	24	120
05/24	7	Economic	Local	WIND	11	12
05/24	7	Economic	System	SOLR	1	
05/24	8	Economic	Local	SOLR	38	65
05/24	8	Economic	Local	WIND	10	12
05/24	8	Economic	System	SOLR	3	
05/24	9	Economic	Local	SOLR	159	294
05/24	9	Economic	Local	WIND	16	52
05/24	9	SelfSchCut	Local	SOLR	0	
05/24	10	Economic	Local	SOLR	408	639
05/24	10	Economic	Local	WIND	45	11
05/24	10	Economic	System	SOLR	3	
05/24	10	Economic	System	WIND	4	9
05/24	10	SelfSchCut	Local	SOLR	0	1
05/24	11	Economic	Local	SOLR	580	719
05/24	11	Economic	Local	WIND	4	
05/24	11	Economic	System	SOLR	3	
05/24	11	Economic	System	WIND	2	24
05/24	12	Economic	Local	SOLR	896	988
05/24	12	Economic	System	SOLR	66	72
05/24	12	Economic	System	WIND	0	
05/24	12	SelfSchCut	Local	SOLR	1	5
05/24	13	Economic	Local	SOLR	677	785
05/24	13	Economic	System	SOLR	19	73

05/24	14	Economic	Local	SOLR	637	743
05/24	14	Economic	System	SOLR	1	1
05/24	14	SelfSchCut	Local	SOLR	1	3
05/24	15	Economic	Local	SOLR	306	718
05/24	15	Economic	Local	WIND	1	
05/24	15	Economic	System	SOLR	3	3
05/24	15	SelfSchCut	Local	SOLR	0	
05/24	16	Economic	Local	SOLR	324	344
05/24	16	Economic	Local	WIND	1	
05/24	16	Economic	System	SOLR	338	537
05/24	16	Economic	System	WIND	55	62
05/24	16	SelfSchCut	Local	SOLR	0	
05/24	17	Economic	Local	SOLR	109	103
05/24	17	Economic	System	SOLR	662	1004
05/24	17	Economic	System	WIND	89	126
05/24	18	Economic	Local	SOLR	65	72
05/24	18	Economic	Local	WIND	1	
05/24	18	Economic	System	SOLR	217	723
05/24	18	Economic	System	WIND	33	104
05/24	19	Economic	Local	SOLR	45	117
05/24	20	Economic	Local	WIND	2	14
05/24	21	Economic	Local	WIND	12	14
05/24	22	Economic	Local	WIND	11	14
05/24	23	Economic	Local	WIND	12	13
05/24	24	Economic	Local	WIND	12	13

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.

