

Wind and Solar Curtailment May 12, 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.

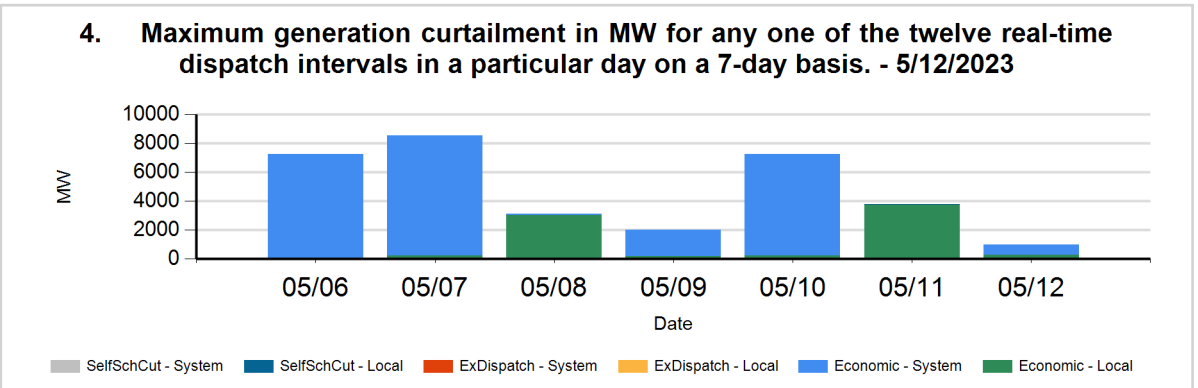
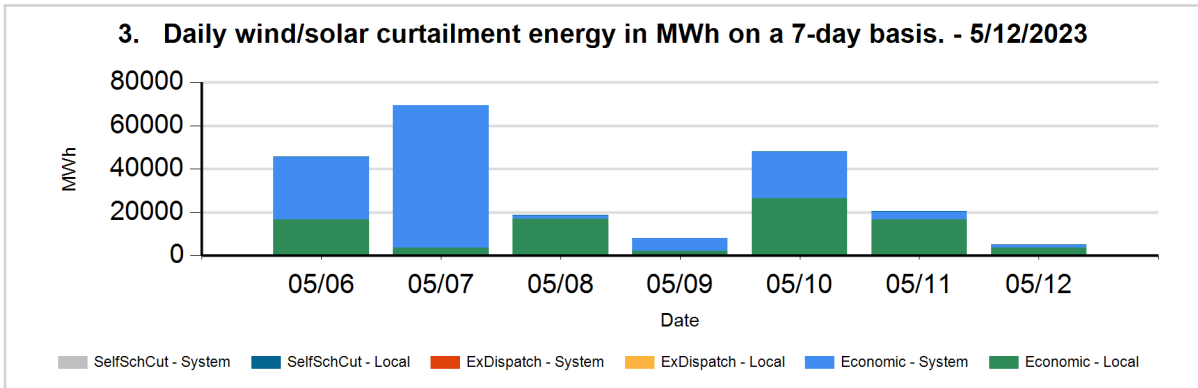
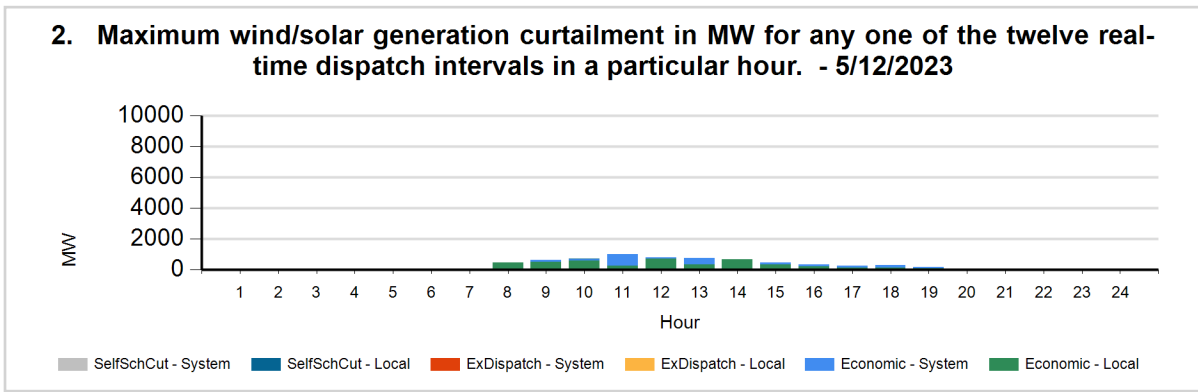
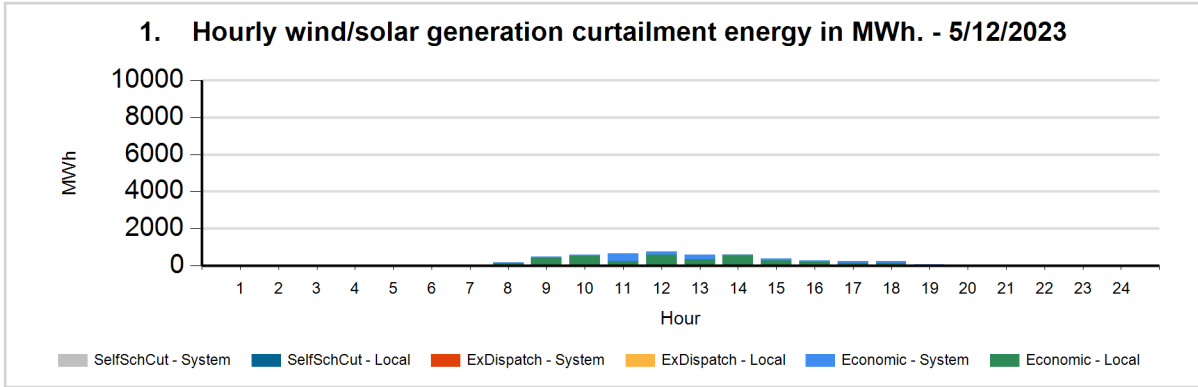
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

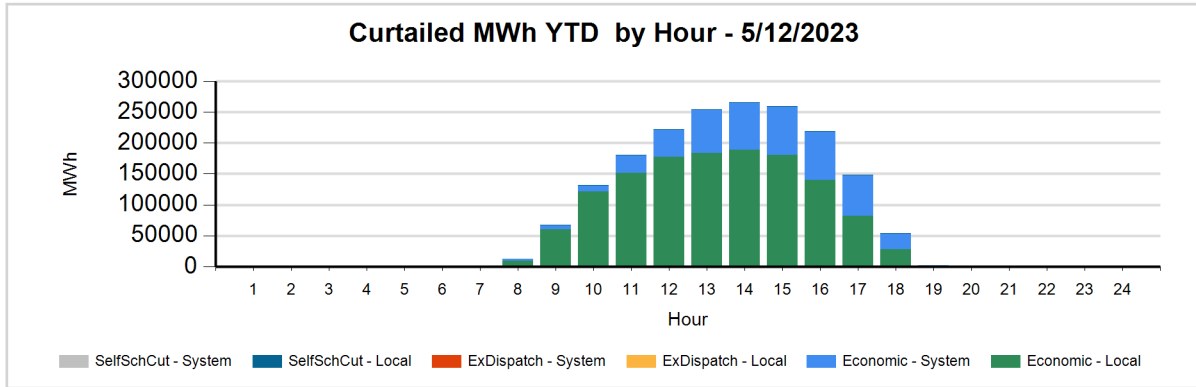
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

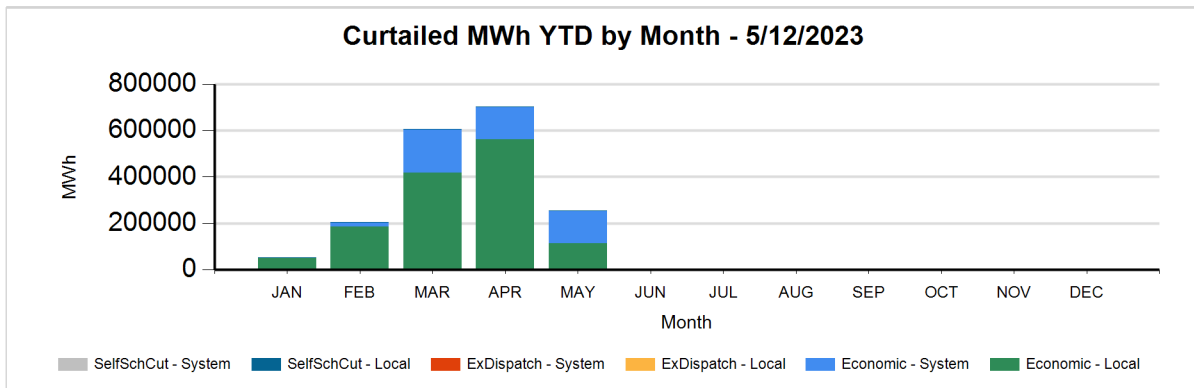
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/12/2023
LocalEconomic	1,326,563
LocalSelfSchCut	440
SystemEconomic	494,201
TOTAL	1,821,204

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/12	8	Economic	Local	SOLR	132	412
05/12	8	Economic	Local	WIND	7	32
05/12	8	Economic	System	SOLR	18	
05/12	8	Economic	System	WIND	3	
05/12	9	Economic	Local	SOLR	402	517
05/12	9	Economic	Local	WIND	1	
05/12	9	Economic	System	SOLR	77	86
05/12	9	Economic	System	WIND	13	5
05/12	10	Economic	Local	SOLR	516	587
05/12	10	Economic	Local	WIND	1	
05/12	10	Economic	System	SOLR	73	88
05/12	10	Economic	System	WIND	5	18
05/12	10	SelfSchCut	Local	SOLR	0	1
05/12	11	Economic	Local	SOLR	232	245
05/12	11	Economic	System	SOLR	386	670
05/12	11	Economic	System	WIND	41	65
05/12	12	Economic	Local	SOLR	544	625
05/12	12	Economic	Local	WIND	41	60
05/12	12	Economic	System	SOLR	154	119
05/12	12	Economic	System	WIND	12	
05/12	13	Economic	Local	SOLR	352	309
05/12	13	Economic	Local	WIND	1	
05/12	13	Economic	System	SOLR	236	417
05/12	13	Economic	System	WIND	11	25
05/12	14	Economic	Local	SOLR	516	666
05/12	14	Economic	Local	WIND	5	16
05/12	14	Economic	System	SOLR	67	
05/12	14	SelfSchCut	Local	SOLR	1	
05/12	15	Economic	Local	SOLR	289	349
05/12	15	Economic	Local	WIND	1	
05/12	15	Economic	System	SOLR	83	88

05/12	15	Economic	System	WIND	1	
05/12	16	Economic	Local	SOLR	200	190
05/12	16	Economic	Local	WIND	0	
05/12	16	Economic	System	SOLR	58	124
05/12	16	Economic	System	WIND	2	2
05/12	17	Economic	Local	SOLR	144	141
05/12	17	Economic	Local	WIND	0	
05/12	17	Economic	System	SOLR	45	85
05/12	17	Economic	System	WIND	34	41
05/12	18	Economic	Local	SOLR	111	122
05/12	18	Economic	Local	WIND	24	
05/12	18	Economic	System	SOLR	48	78
05/12	18	Economic	System	WIND	64	90
05/12	19	Economic	Local	SOLR	30	79
05/12	19	Economic	Local	WIND	8	
05/12	19	Economic	System	WIND	26	101

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.