

Wind and Solar Curtailment April 07, 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.

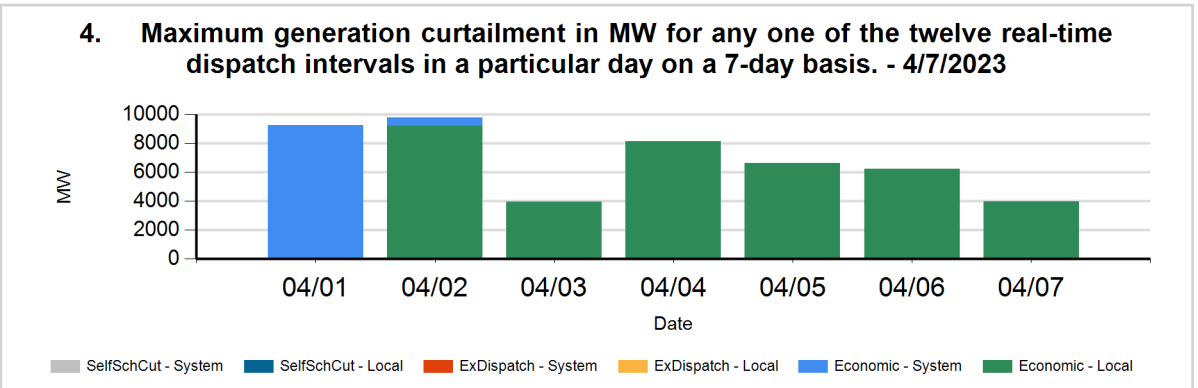
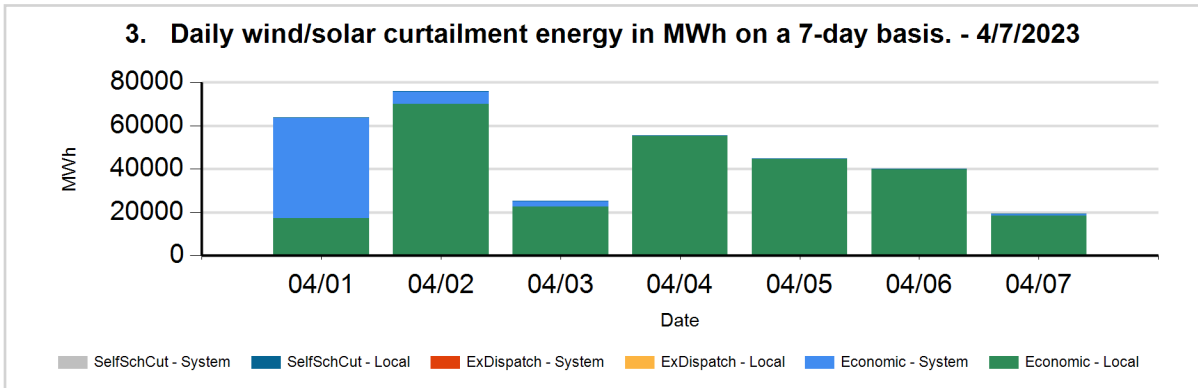
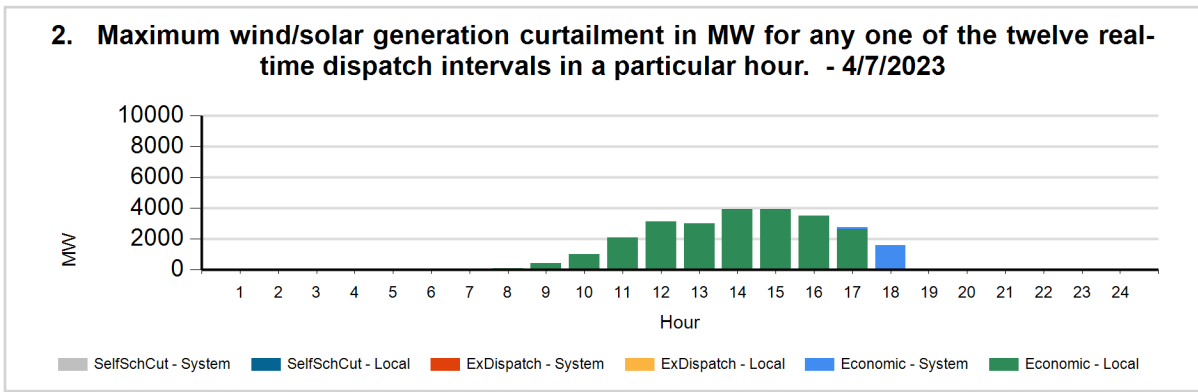
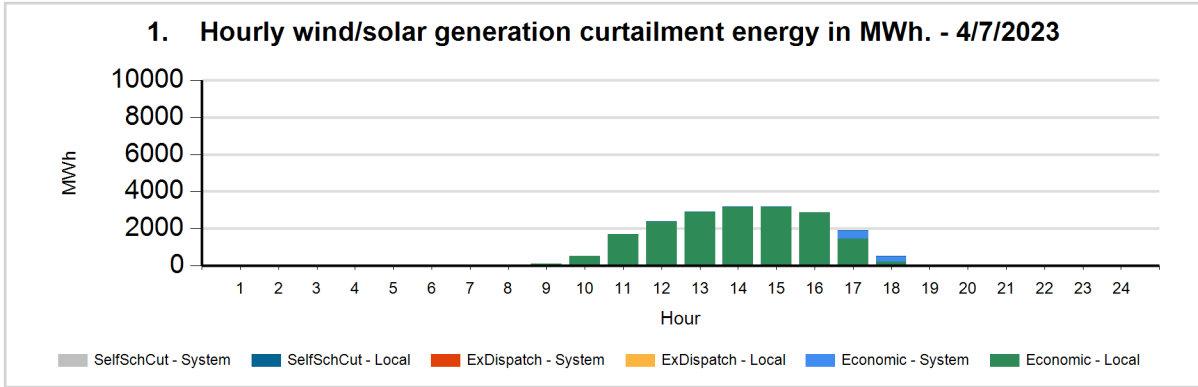
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

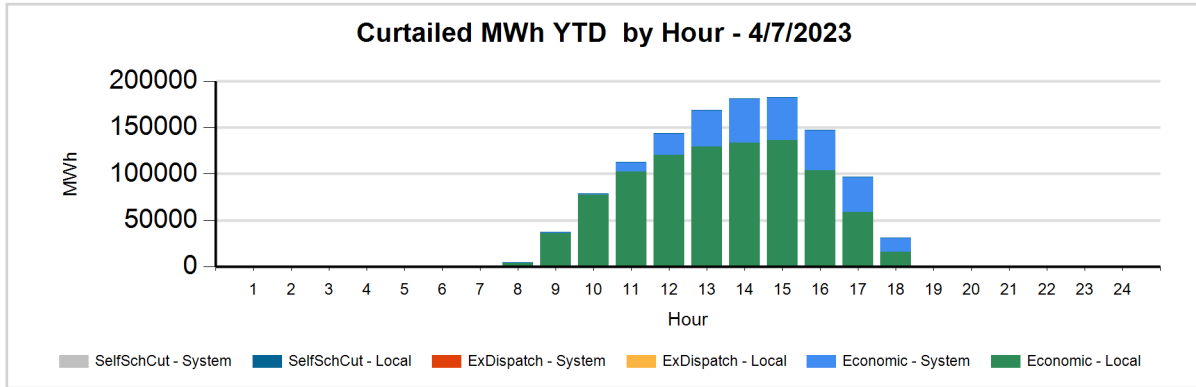
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

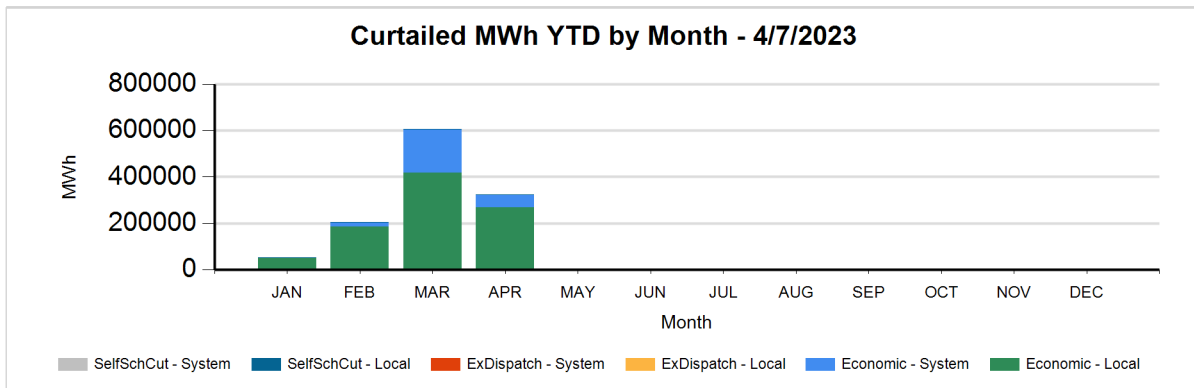
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/7/2023
LocalEconomic	919,999
LocalSelfSchCut	94
SystemEconomic	267,543
TOTAL	1,187,635

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/07	1	Economic	Local	WIND	5	16
04/07	2	Economic	Local	WIND	5	14
04/07	3	Economic	Local	WIND	3	9
04/07	3	Economic	System	WIND	0	
04/07	4	Economic	Local	WIND	13	15
04/07	5	Economic	Local	WIND	13	14
04/07	6	Economic	Local	WIND	8	14
04/07	7	Economic	Local	WIND	1	8
04/07	7	Economic	System	WIND	1	
04/07	8	Economic	Local	SOLR	6	68
04/07	8	Economic	Local	WIND	1	9
04/07	9	Economic	Local	SOLR	99	396
04/07	10	Economic	Local	SOLR	514	1003
04/07	10	Economic	Local	WIND	1	11
04/07	11	Economic	Local	SOLR	1655	2046
04/07	11	Economic	Local	WIND	31	33
04/07	11	SelfSchCut	Local	SOLR	0	
04/07	12	Economic	Local	SOLR	2343	3072
04/07	12	Economic	Local	WIND	25	37
04/07	12	SelfSchCut	Local	SOLR	2	
04/07	13	Economic	Local	SOLR	2837	2955
04/07	13	Economic	Local	WIND	48	46
04/07	13	SelfSchCut	Local	SOLR	5	
04/07	14	Economic	Local	SOLR	3114	3841
04/07	14	Economic	Local	WIND	60	73
04/07	14	SelfSchCut	Local	SOLR	2	1
04/07	15	Economic	Local	SOLR	3085	3811
04/07	15	Economic	Local	WIND	105	120
04/07	15	SelfSchCut	Local	SOLR	3	2
04/07	16	Economic	Local	SOLR	2754	3333
04/07	16	Economic	Local	WIND	108	165

04/07	17	Economic	Local	SOLR	1388	2538
04/07	17	Economic	Local	WIND	48	66
04/07	17	Economic	System	SOLR	416	137
04/07	17	Economic	System	WIND	32	15
04/07	17	SelfSchCut	Local	SOLR	1	
04/07	18	Economic	Local	SOLR	195	1
04/07	18	Economic	Local	WIND	7	8
04/07	18	Economic	System	SOLR	284	1518
04/07	18	Economic	System	WIND	25	74
04/07	18	SelfSchCut	Local	SOLR	1	
04/07	19	Economic	Local	SOLR	0	
04/07	19	Economic	Local	WIND	1	
04/07	19	Economic	System	WIND	7	15
04/07	20	Economic	System	WIND	4	10
04/07	24	Economic	System	WIND	6	39

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.