

Wind and Solar Curtailment April 24, 2024

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.

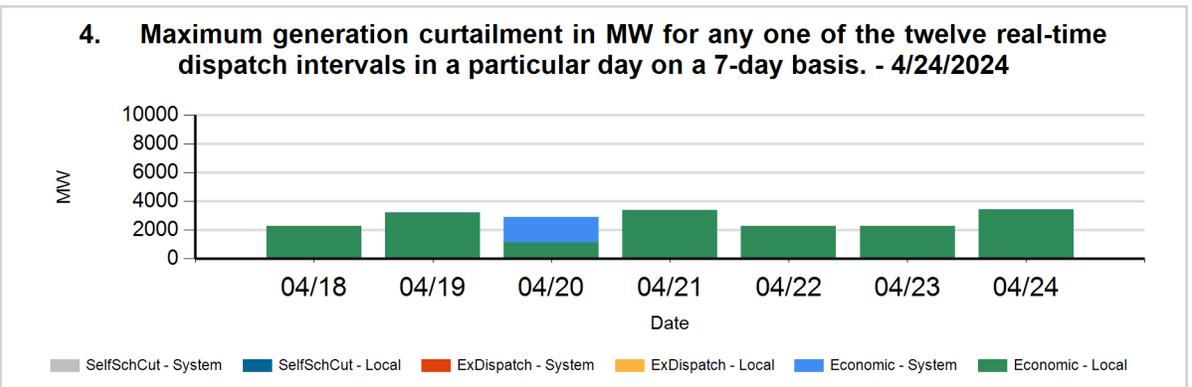
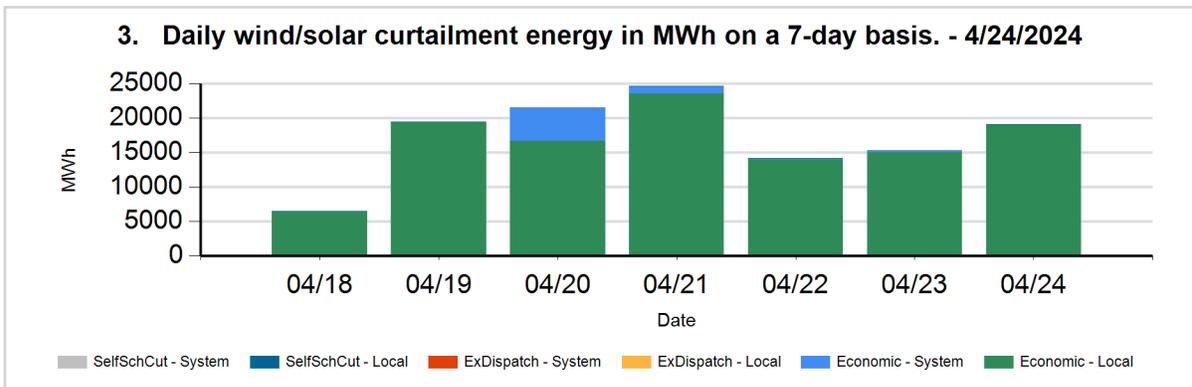
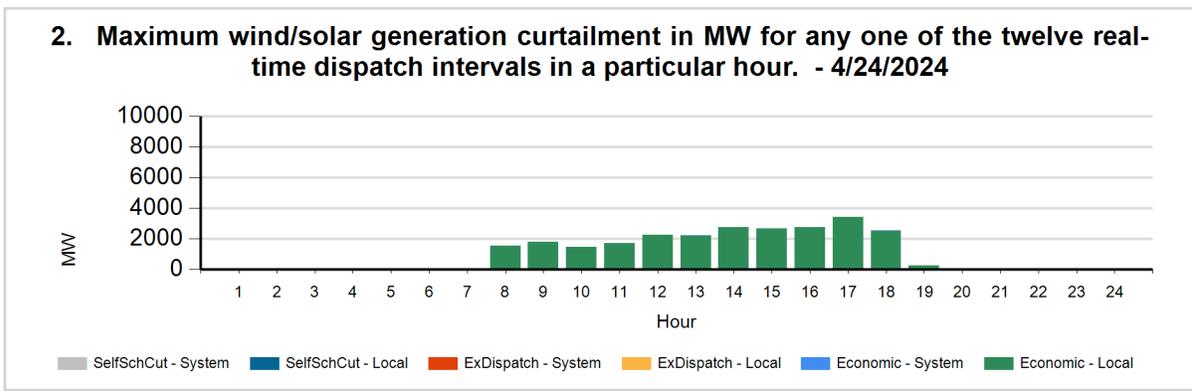
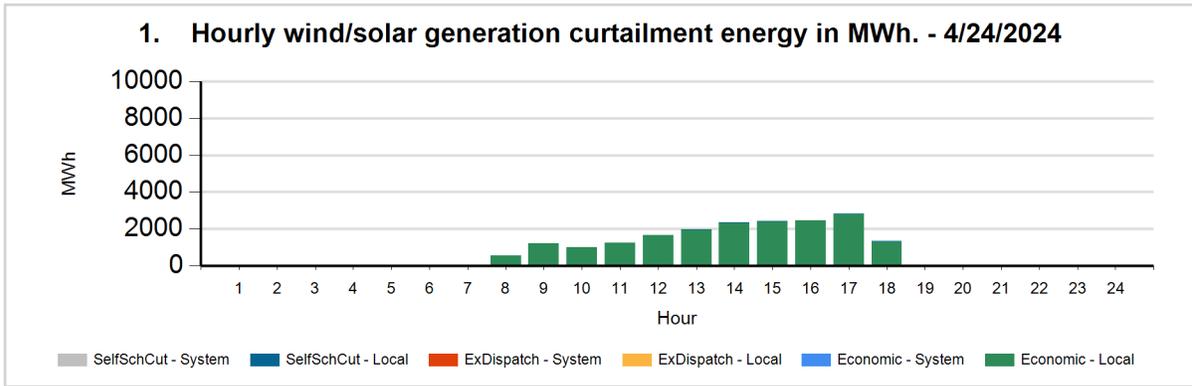
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

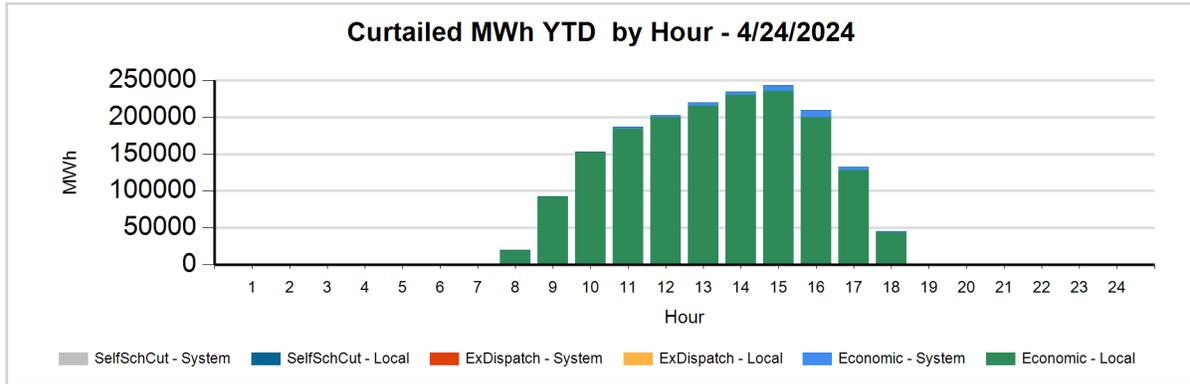
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

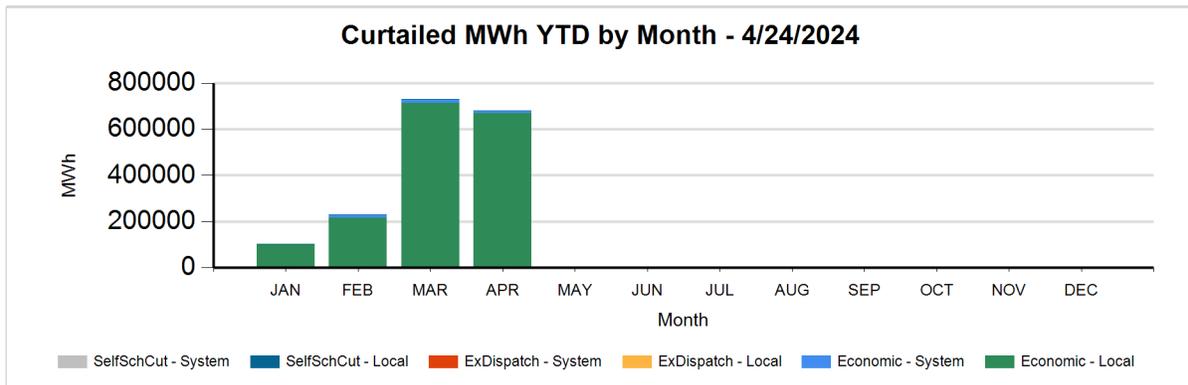
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/24/2024
LocalEconomic	1,701,518
LocalSelfSchCut	1,007
SystemEconomic	39,914
TOTAL	1,742,440

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/24	8	Economic	Local	SOLR	539	1521
04/24	8	Economic	Local	WIND	4	26
04/24	9	Economic	Local	SOLR	1168	1699
04/24	9	Economic	Local	WIND	50	94
04/24	10	Economic	Local	SOLR	984	1453
04/24	10	Economic	Local	WIND	14	16
04/24	11	Economic	Local	SOLR	1237	1692
04/24	11	Economic	Local	WIND	8	12
04/24	12	Economic	Local	SOLR	1637	2105
04/24	12	Economic	Local	WIND	18	146
04/24	12	SelfSchCut	Local	SOLR	0	
04/24	13	Economic	Local	SOLR	1946	2201
04/24	13	Economic	Local	WIND	4	5
04/24	13	SelfSchCut	Local	SOLR	3	8
04/24	14	Economic	Local	SOLR	2316	2613
04/24	14	Economic	Local	WIND	35	120
04/24	14	SelfSchCut	Local	SOLR	1	
04/24	15	Economic	Local	SOLR	2297	2385
04/24	15	Economic	Local	WIND	120	271
04/24	15	SelfSchCut	Local	SOLR	1	
04/24	16	Economic	Local	SOLR	2370	2655
04/24	16	Economic	Local	WIND	88	89
04/24	16	Economic	System	WIND	0	
04/24	17	Economic	Local	SOLR	2519	3024
04/24	17	Economic	Local	WIND	318	406
04/24	17	Economic	System	SOLR	5	
04/24	18	Economic	Local	SOLR	1217	2145
04/24	18	Economic	Local	WIND	114	363
04/24	18	Economic	System	SOLR	2	15
04/24	19	Economic	Local	SOLR	29	229
04/24	19	Economic	System	SOLR	8	

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.