

Wind and Solar Curtailment March 23, 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.

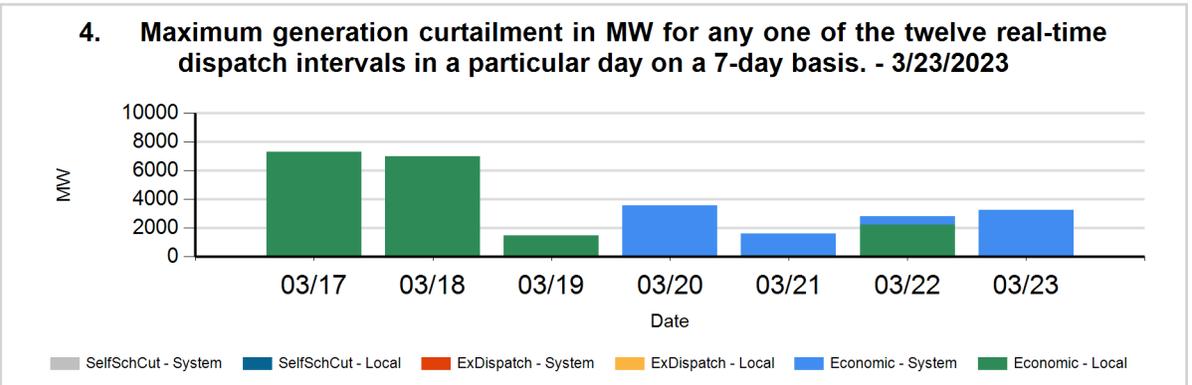
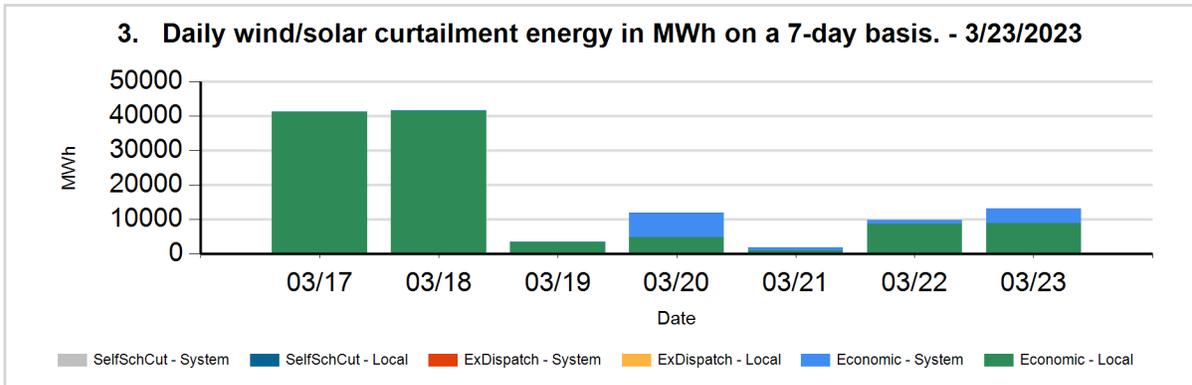
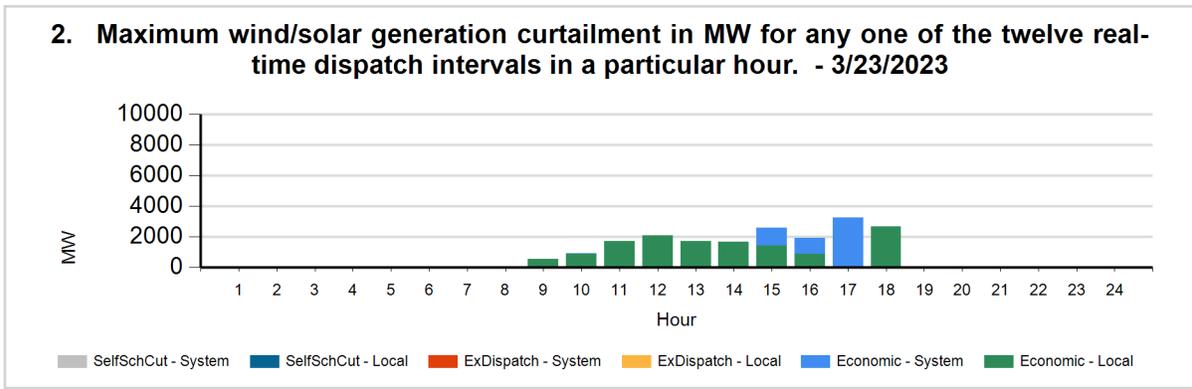
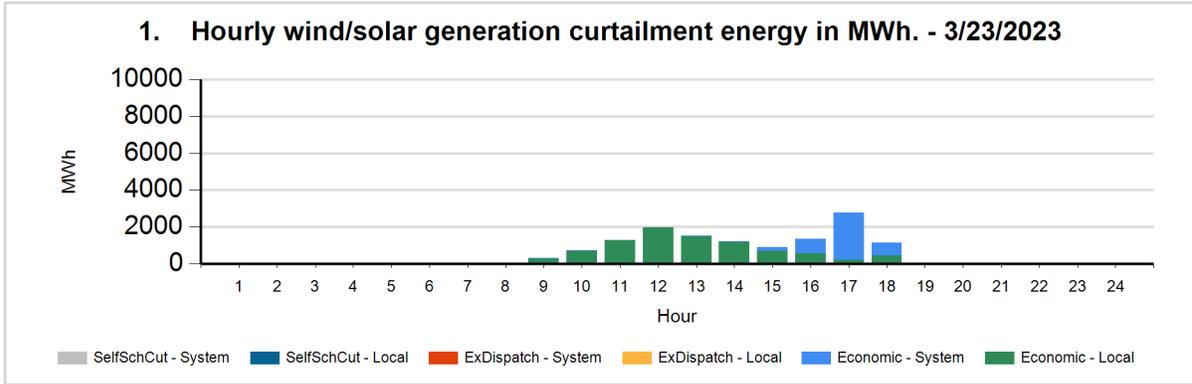
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

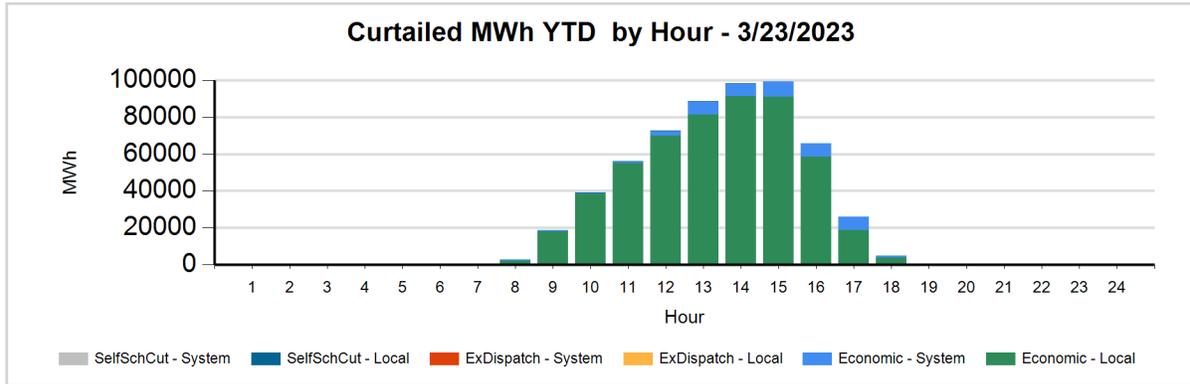
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

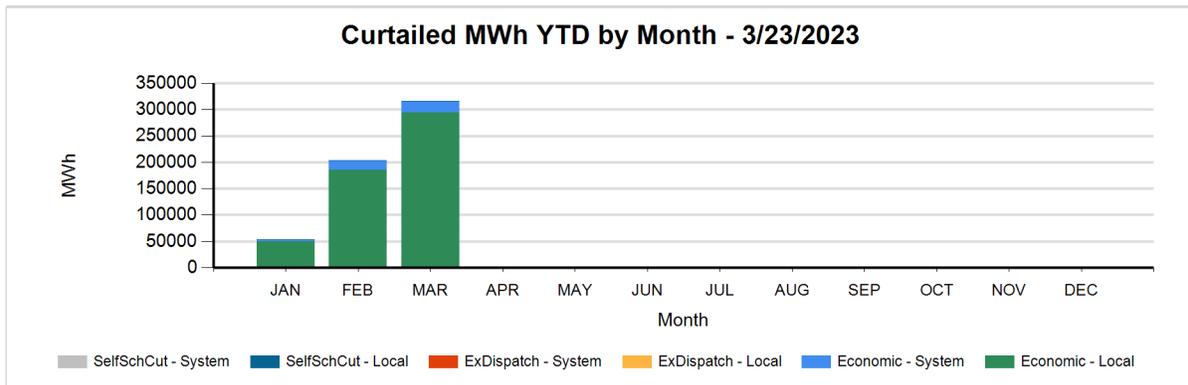
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/23/2023
LocalEconomic	528,569
LocalSelfSchCut	12
SystemEconomic	44,363
TOTAL	572,944

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/23	8	Economic	System	SOLR	9	32
03/23	9	Economic	Local	SOLR	316	541
03/23	9	Economic	System	SOLR	8	
03/23	10	Economic	Local	SOLR	734	896
03/23	10	Economic	System	SOLR	1	7
03/23	11	Economic	Local	SOLR	1287	1727
03/23	11	Economic	System	SOLR	0	
03/23	12	Economic	Local	SOLR	1959	2087
03/23	12	Economic	System	SOLR	0	
03/23	12	Economic	System	WIND	0	
03/23	13	Economic	Local	SOLR	1521	1678
03/23	13	Economic	Local	WIND	12	36
03/23	13	Economic	System	SOLR	2	
03/23	14	Economic	Local	SOLR	1198	1651
03/23	14	Economic	System	SOLR	1	
03/23	14	Economic	System	WIND	1	
03/23	15	Economic	Local	SOLR	628	1344
03/23	15	Economic	Local	WIND	57	79
03/23	15	Economic	System	SOLR	144	945
03/23	15	Economic	System	WIND	75	203
03/23	16	Economic	Local	SOLR	469	778
03/23	16	Economic	Local	WIND	83	80
03/23	16	Economic	System	SOLR	559	822
03/23	16	Economic	System	WIND	223	229
03/23	17	Economic	Local	SOLR	162	16
03/23	17	Economic	Local	WIND	29	
03/23	17	Economic	System	SOLR	2221	2637
03/23	17	Economic	System	WIND	368	594
03/23	18	Economic	Local	SOLR	385	2354
03/23	18	Economic	Local	WIND	73	331
03/23	18	Economic	System	SOLR	537	
03/23	18	Economic	System	WIND	128	
03/23	19	Economic	System	SOLR	0	2

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.