

Wind and Solar Curtailment March 22, 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.

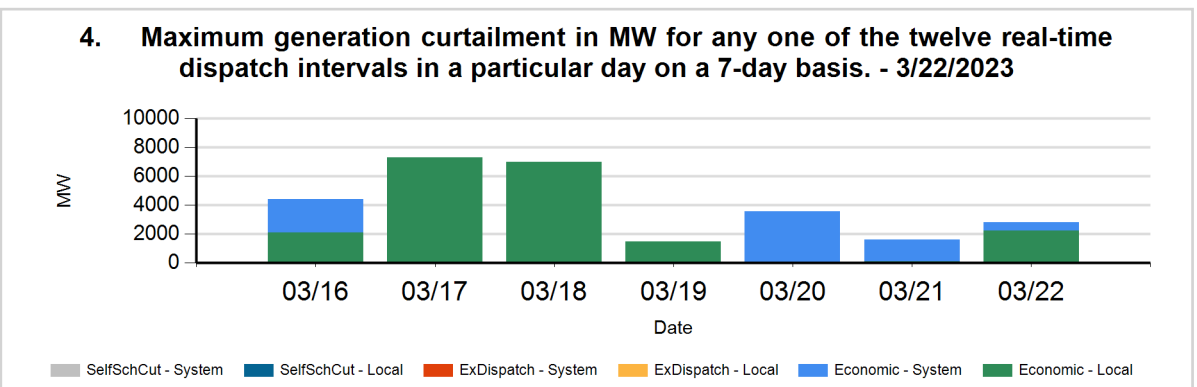
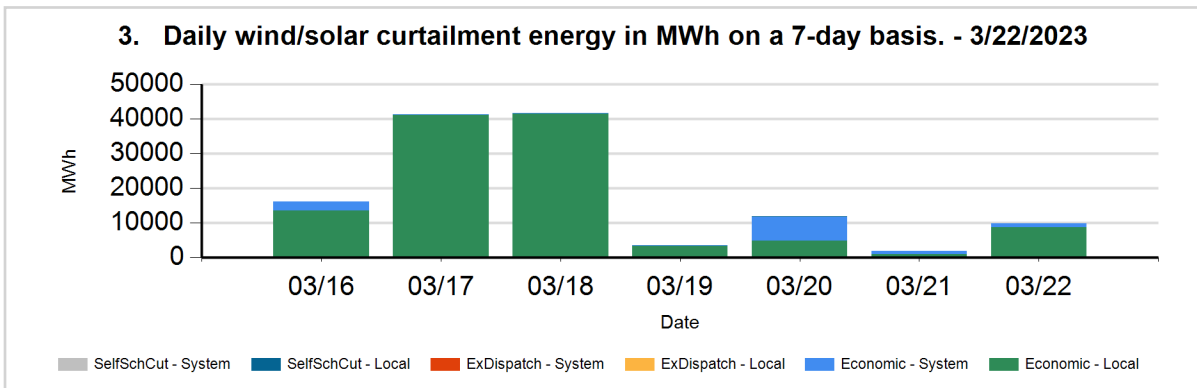
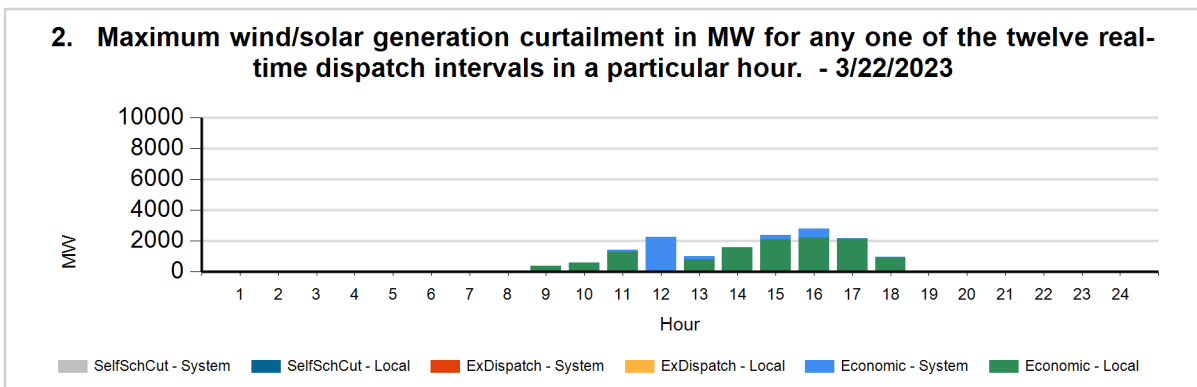
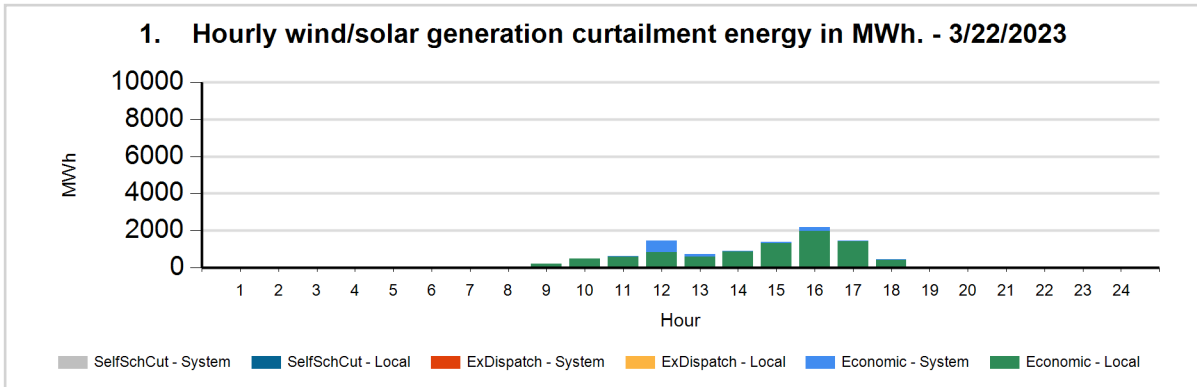
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

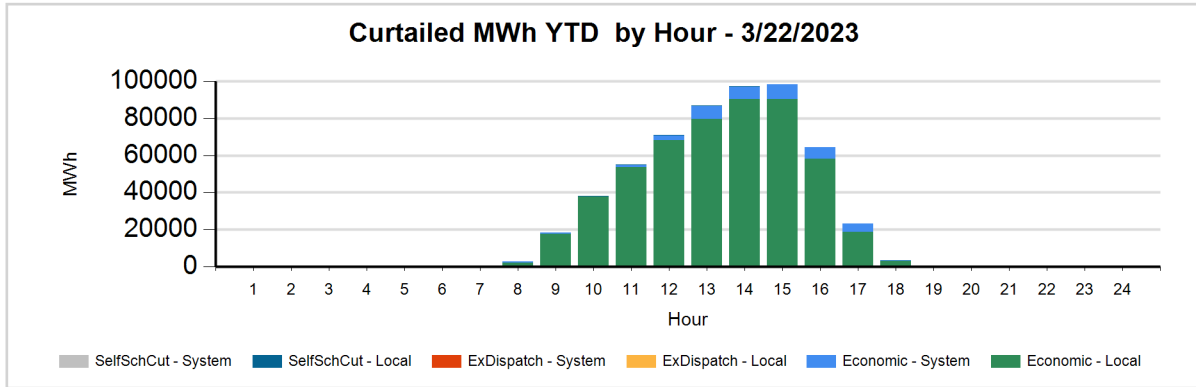
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

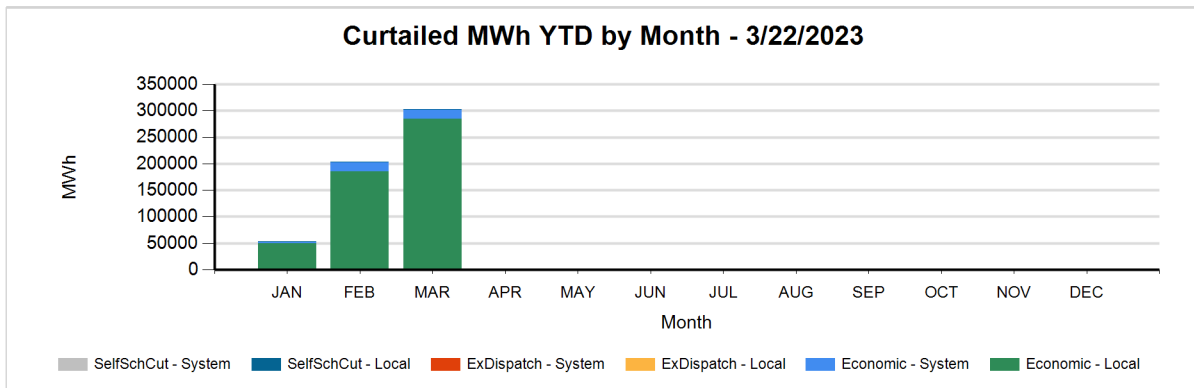
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/22/2023
LocalEconomic	519,655
LocalSelfSchCut	12
SystemEconomic	40,086
TOTAL	559,753

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/22	8	Economic	Local	SOLR	5	21
03/22	8	Economic	System	SOLR	2	
03/22	9	Economic	Local	SOLR	200	352
03/22	9	Economic	System	SOLR	0	
03/22	10	Economic	Local	SOLR	471	573
03/22	11	Economic	Local	SOLR	554	1158
03/22	11	Economic	Local	WIND	31	124
03/22	11	Economic	System	SOLR	10	105
03/22	11	Economic	System	WIND	9	47
03/22	12	Economic	Local	SOLR	720	
03/22	12	Economic	Local	WIND	111	
03/22	12	Economic	System	SOLR	522	1983
03/22	12	Economic	System	WIND	113	249
03/22	13	Economic	Local	SOLR	466	668
03/22	13	Economic	Local	WIND	111	120
03/22	13	Economic	System	SOLR	47	44
03/22	13	Economic	System	WIND	103	152
03/22	14	Economic	Local	SOLR	825	1415
03/22	14	Economic	Local	WIND	51	122
03/22	14	Economic	System	SOLR	12	32
03/22	14	Economic	System	WIND	19	11
03/22	15	Economic	Local	SOLR	1219	1948
03/22	15	Economic	Local	WIND	97	121
03/22	15	Economic	System	SOLR	37	262
03/22	15	Economic	System	WIND	25	58
03/22	16	Economic	Local	SOLR	1851	2089
03/22	16	Economic	Local	WIND	121	121
03/22	16	Economic	System	SOLR	135	519
03/22	16	Economic	System	WIND	75	76
03/22	17	Economic	Local	SOLR	1403	2004
03/22	17	Economic	Local	WIND	30	121

03/22	17	Economic	System	SOLR	6	19
03/22	17	Economic	System	WIND	5	12
03/22	18	Economic	Local	SOLR	445	941
03/22	18	Economic	System	SOLR	2	11
03/22	19	Economic	Local	SOLR	1	13
03/22	19	Economic	System	SOLR	0	
03/22	24	Economic	Local	WIND	1	17

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.