

Wind and Solar Curtailment May 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.

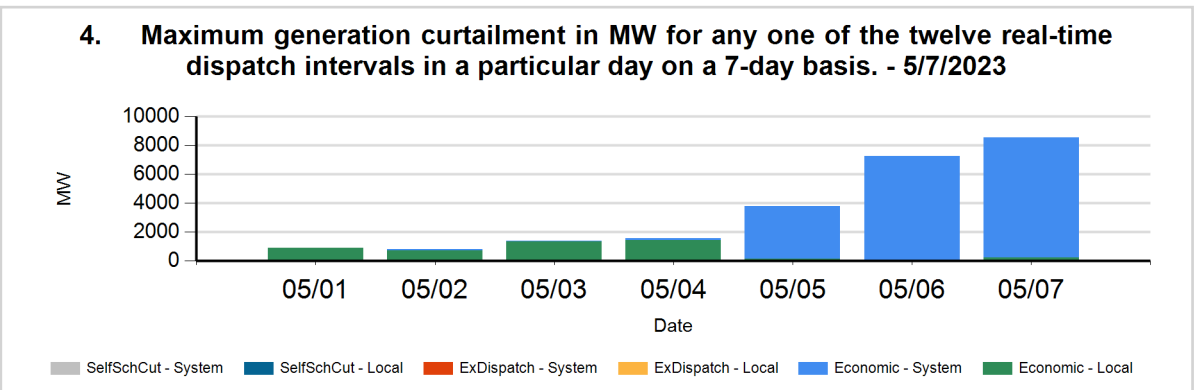
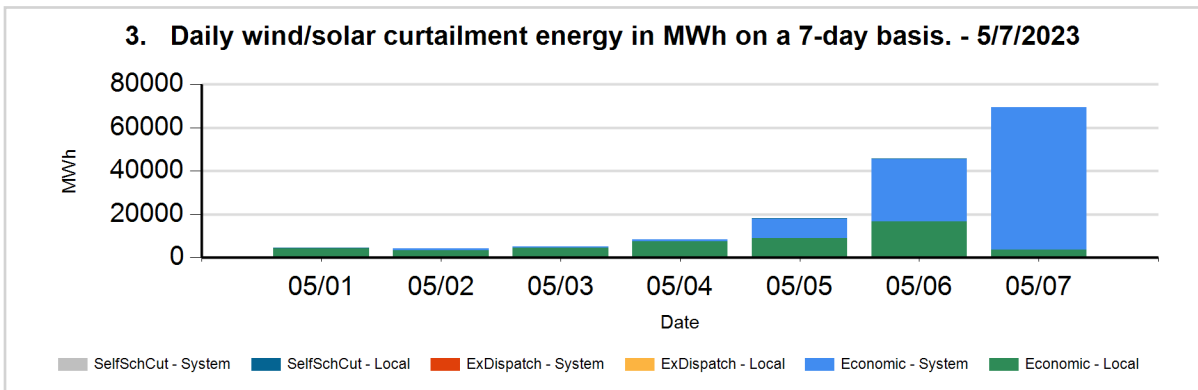
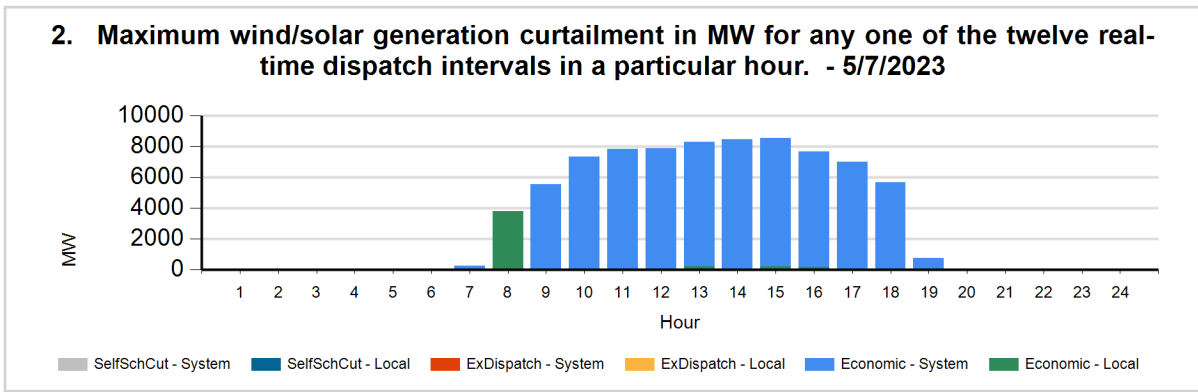
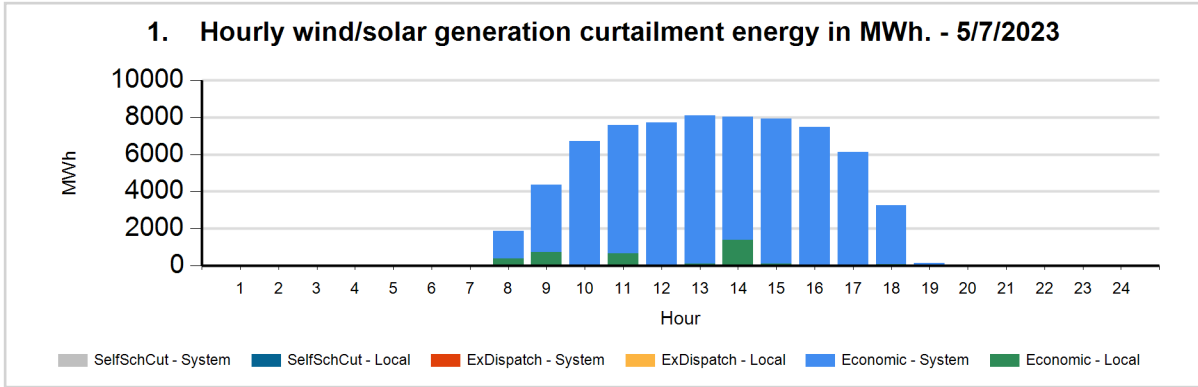
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

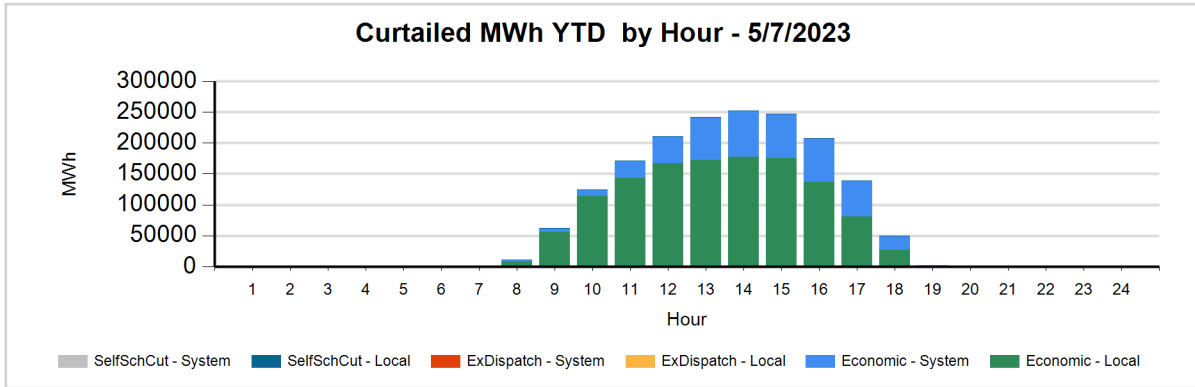
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

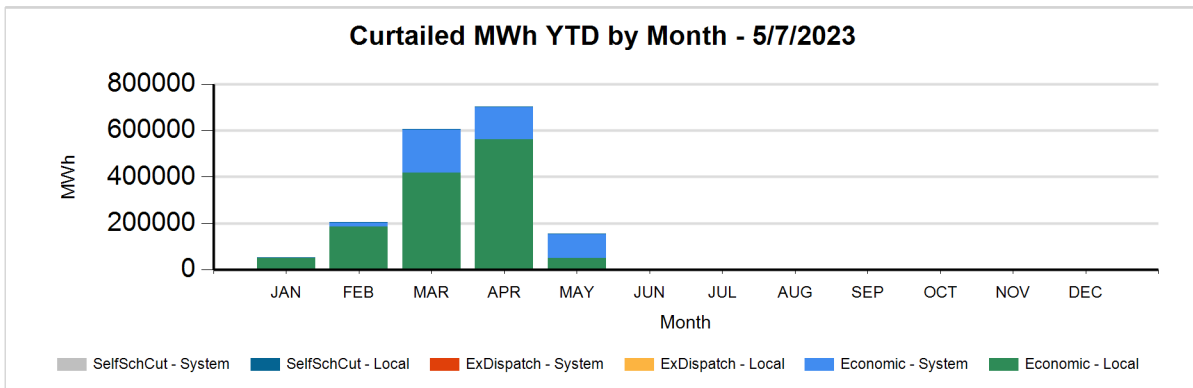
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/7/2023
LocalEconomic	1,260,962
LocalSelfSchCut	391
SystemEconomic	459,565
TOTAL	1,720,918

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/07	7	Economic	System	SOLR	18	189
05/07	7	Economic	System	WIND	8	47
05/07	8	Economic	Local	SOLR	347	3692
05/07	8	Economic	Local	WIND	20	102
05/07	8	Economic	System	SOLR	1434	
05/07	8	Economic	System	WIND	56	
05/07	9	Economic	Local	SOLR	708	
05/07	9	Economic	Local	WIND	18	
05/07	9	Economic	System	SOLR	3527	5366
05/07	9	Economic	System	WIND	114	200
05/07	10	Economic	Local	SOLR	8	14
05/07	10	Economic	System	SOLR	6426	6981
05/07	10	Economic	System	WIND	280	349
05/07	11	Economic	Local	SOLR	615	14
05/07	11	Economic	Local	WIND	40	
05/07	11	Economic	System	SOLR	6529	7324
05/07	11	Economic	System	WIND	386	485
05/07	12	Economic	Local	SOLR	13	14
05/07	12	Economic	System	SOLR	7223	7263
05/07	12	Economic	System	WIND	469	604
05/07	13	Economic	Local	SOLR	112	214
05/07	13	Economic	System	SOLR	7297	7400
05/07	13	Economic	System	WIND	678	674
05/07	14	Economic	Local	SOLR	1231	13
05/07	14	Economic	Local	WIND	139	
05/07	14	Economic	System	SOLR	5965	7642
05/07	14	Economic	System	WIND	691	819
05/07	15	Economic	Local	SOLR	113	217
05/07	15	Economic	System	SOLR	6914	7419
05/07	15	Economic	System	WIND	891	905
05/07	16	Economic	Local	SOLR	29	164

05/07	16	Economic	System	SOLR	6747	6656
05/07	16	Economic	System	WIND	692	873
05/07	17	Economic	Local	SOLR	13	
05/07	17	Economic	System	SOLR	5816	6586
05/07	17	Economic	System	WIND	296	435
05/07	18	Economic	Local	SOLR	52	
05/07	18	Economic	System	SOLR	3060	5428
05/07	18	Economic	System	WIND	122	255
05/07	19	Economic	Local	SOLR	14	42
05/07	19	Economic	Local	WIND	1	
05/07	19	Economic	System	SOLR	104	610
05/07	19	Economic	System	WIND	19	86

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.