

Wind and Solar Curtailment May 20, 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.

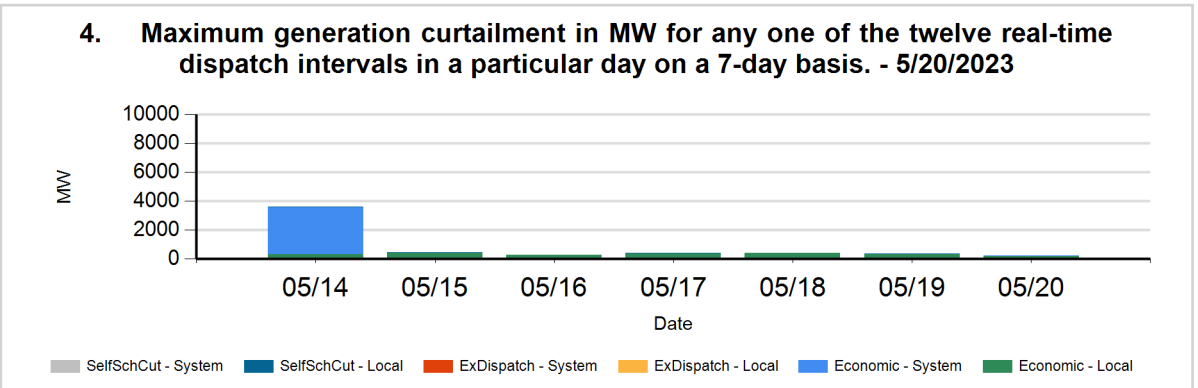
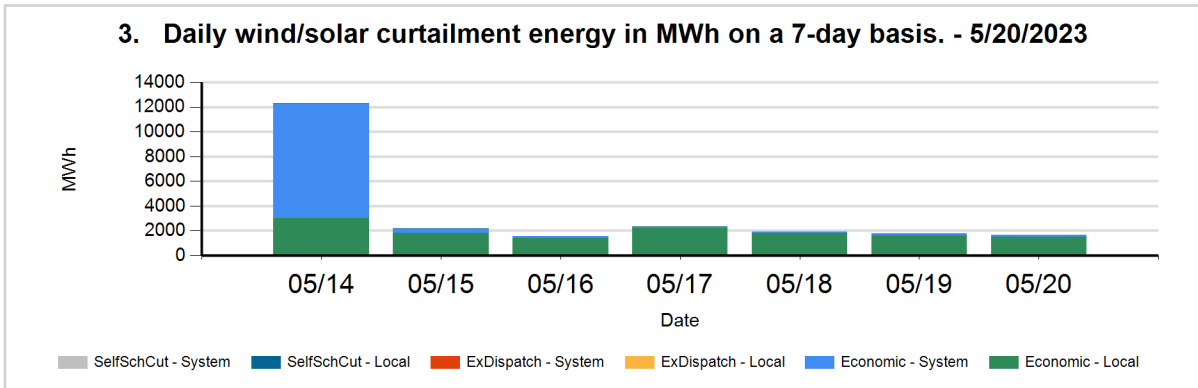
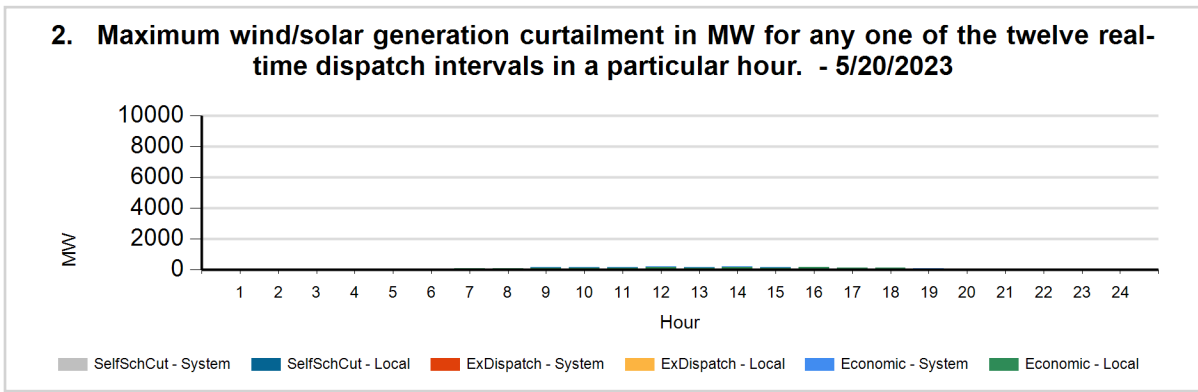
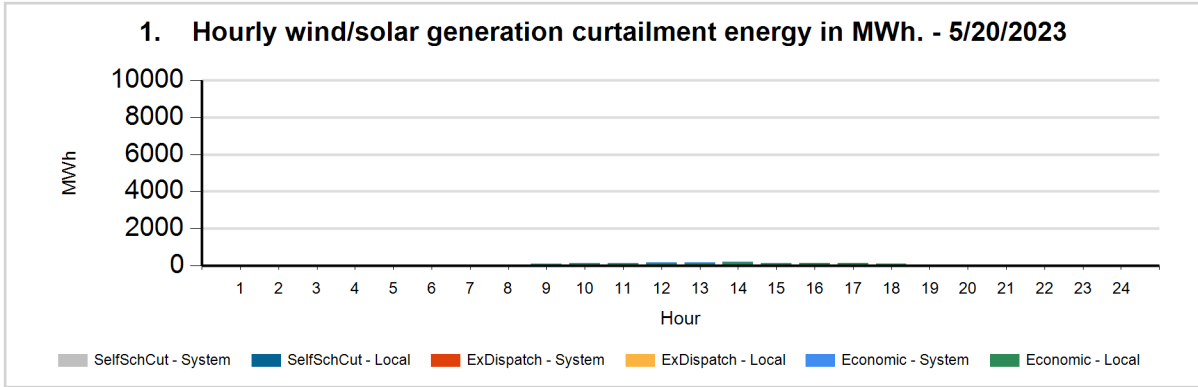
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

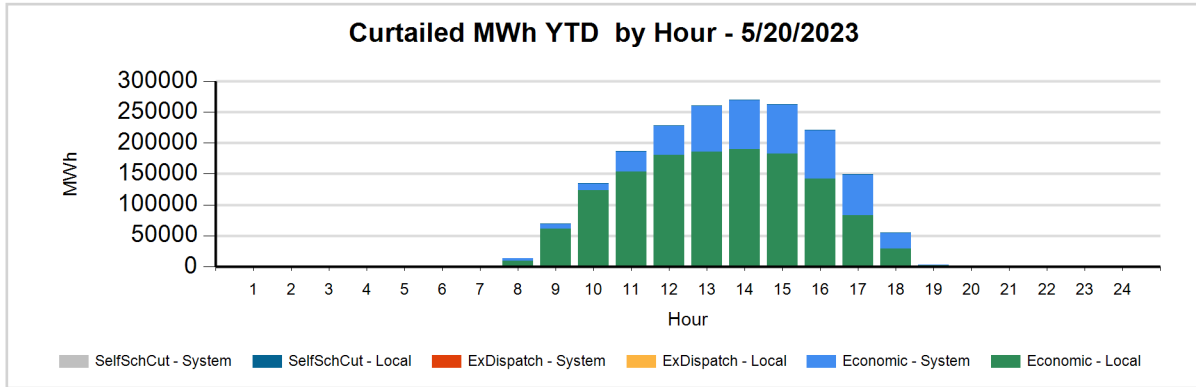
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

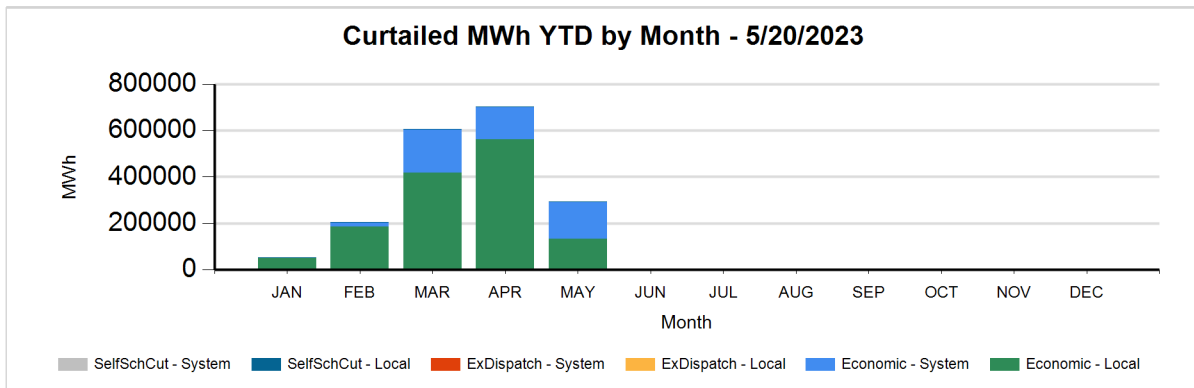
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/20/2023
LocalEconomic	1,345,420
LocalSelfSchCut	508
SystemEconomic	512,267
TOTAL	1,858,194

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/20	1	Economic	Local	WIND	7	7
05/20	2	Economic	Local	WIND	7	7
05/20	3	Economic	Local	WIND	7	7
05/20	4	Economic	Local	WIND	6	6
05/20	5	Economic	Local	WIND	6	7
05/20	6	Economic	Local	WIND	6	7
05/20	7	Economic	Local	SOLR	6	76
05/20	7	Economic	Local	WIND	13	16
05/20	7	Economic	System	WIND	12	
05/20	8	Economic	Local	SOLR	28	56
05/20	8	Economic	Local	WIND	15	38
05/20	9	Economic	Local	SOLR	84	100
05/20	9	Economic	Local	WIND	16	15
05/20	9	Economic	System	SOLR	6	12
05/20	9	Economic	System	WIND	6	22
05/20	10	Economic	Local	SOLR	112	102
05/20	10	Economic	Local	WIND	21	15
05/20	10	Economic	System	SOLR	1	8
05/20	10	Economic	System	WIND	17	38
05/20	11	Economic	Local	SOLR	122	122
05/20	11	Economic	Local	WIND	16	15
05/20	11	Economic	System	SOLR	6	22
05/20	11	Economic	System	WIND	1	4
05/20	12	Economic	Local	SOLR	140	147
05/20	12	Economic	Local	WIND	15	15
05/20	12	Economic	System	SOLR	27	33
05/20	12	Economic	System	WIND	5	13
05/20	13	Economic	Local	SOLR	133	124
05/20	13	Economic	Local	WIND	18	15
05/20	13	Economic	System	SOLR	21	32
05/20	13	Economic	System	WIND	5	11

05/20	14	Economic	Local	SOLR	140	153
05/20	14	Economic	Local	WIND	15	15
05/20	14	Economic	System	SOLR	33	35
05/20	14	Economic	System	WIND	5	6
05/20	15	Economic	Local	SOLR	128	122
05/20	15	Economic	Local	WIND	15	15
05/20	15	Economic	System	SOLR	7	34
05/20	15	Economic	System	WIND	0	
05/20	16	Economic	Local	SOLR	119	129
05/20	16	Economic	Local	WIND	15	15
05/20	17	Economic	Local	SOLR	106	121
05/20	17	Economic	Local	WIND	15	15
05/20	18	Economic	Local	SOLR	70	89
05/20	18	Economic	Local	WIND	16	16
05/20	18	Economic	System	SOLR	0	
05/20	19	Economic	Local	SOLR	17	40
05/20	19	Economic	Local	WIND	15	16
05/20	19	Economic	System	SOLR	14	43
05/20	20	Economic	Local	WIND	14	16
05/20	21	Economic	Local	WIND	13	13
05/20	22	Economic	Local	WIND	13	13
05/20	23	Economic	Local	WIND	13	13
05/20	24	Economic	Local	WIND	12	13

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.