

Wind and Solar Curtailment April 16, 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.

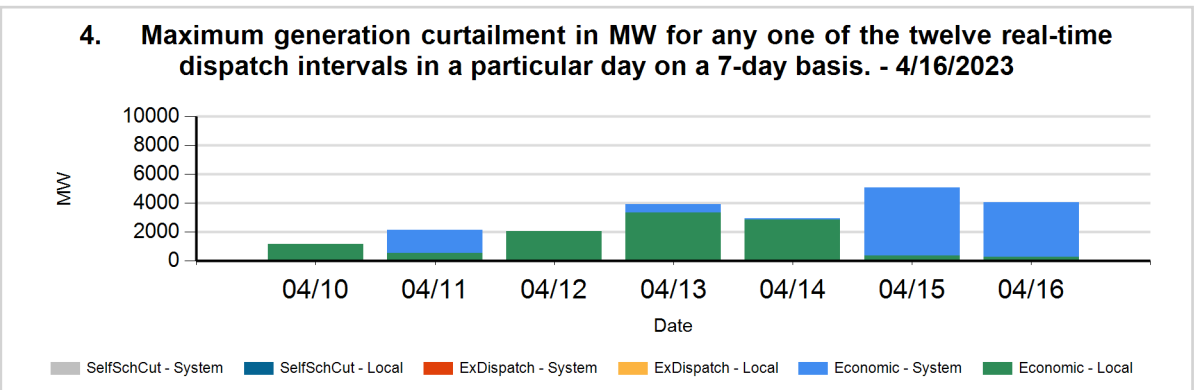
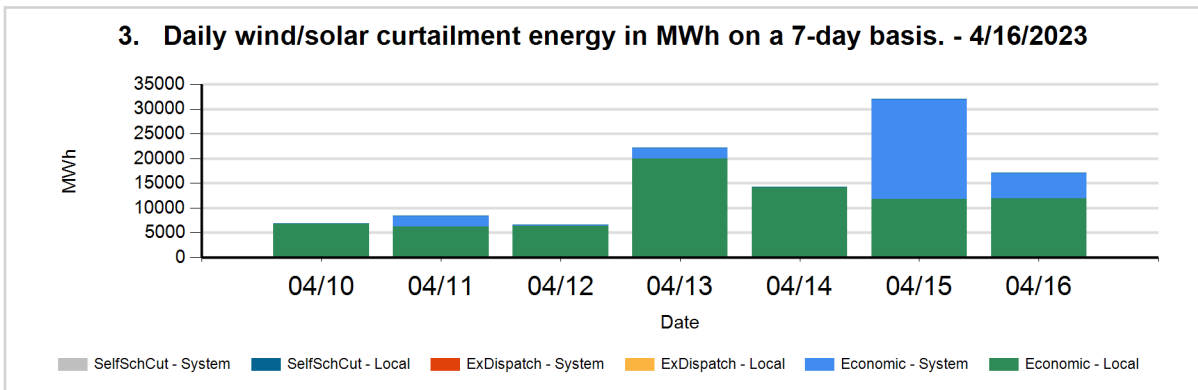
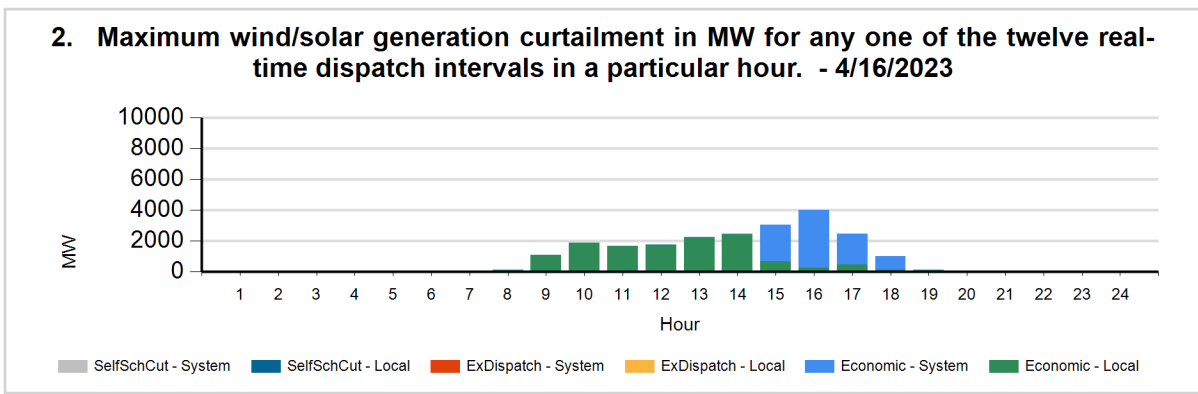
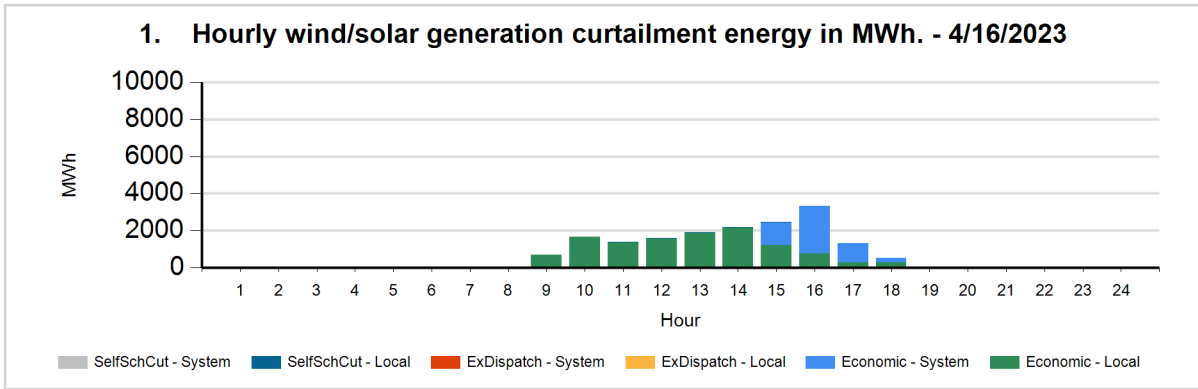
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

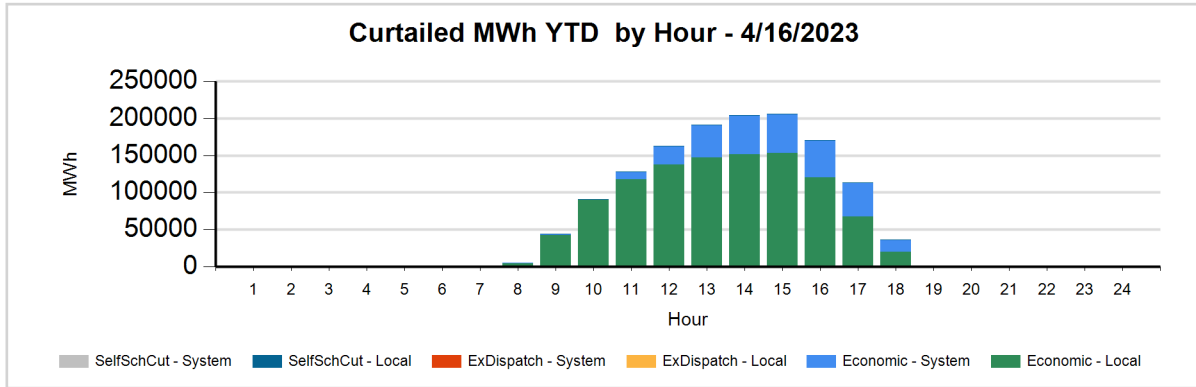
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

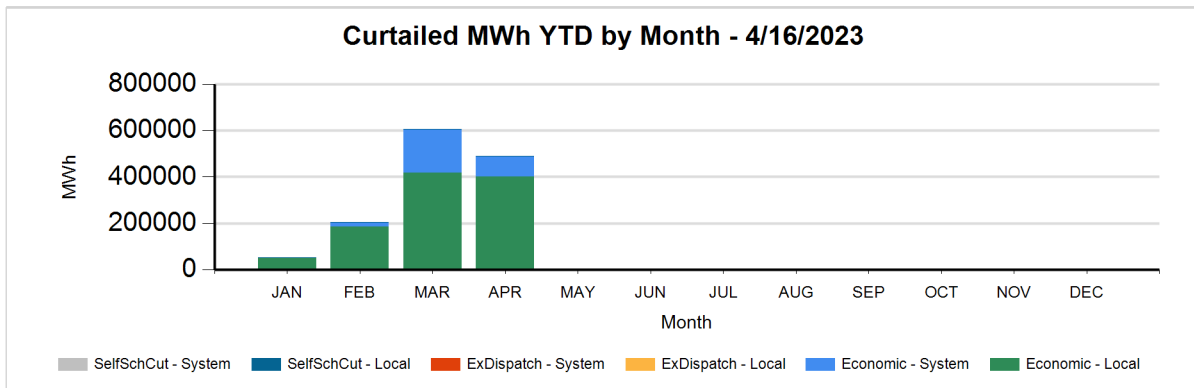
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/16/2023
LocalEconomic	1,054,211
LocalSelfSchCut	224
SystemEconomic	299,632
TOTAL	1,354,068

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/16	1	Economic	Local	WIND	6	8
04/16	2	Economic	Local	WIND	7	8
04/16	3	Economic	Local	WIND	6	8
04/16	4	Economic	Local	WIND	1	
04/16	4	Economic	System	WIND	5	13
04/16	5	Economic	Local	WIND	6	12
04/16	5	Economic	System	WIND	4	
04/16	6	Economic	Local	WIND	5	
04/16	6	Economic	System	WIND	7	12
04/16	7	Economic	Local	WIND	6	
04/16	7	Economic	System	WIND	6	12
04/16	8	Economic	Local	SOLR	16	57
04/16	8	Economic	Local	WIND	12	14
04/16	8	Economic	System	SOLR	12	69
04/16	9	Economic	Local	SOLR	655	1035
04/16	9	Economic	Local	WIND	20	30
04/16	10	Economic	Local	SOLR	1626	1843
04/16	10	Economic	Local	WIND	20	40
04/16	11	Economic	Local	SOLR	1343	1632
04/16	11	Economic	Local	WIND	22	34
04/16	11	SelfSchCut	Local	SOLR	2	
04/16	12	Economic	Local	SOLR	1544	1707
04/16	12	Economic	Local	WIND	31	6
04/16	12	Economic	System	WIND	1	15
04/16	12	SelfSchCut	Local	SOLR	2	5
04/16	13	Economic	Local	SOLR	1870	2202
04/16	13	Economic	Local	WIND	15	7
04/16	13	Economic	System	WIND	21	47
04/16	13	SelfSchCut	Local	SOLR	4	
04/16	14	Economic	Local	SOLR	2115	2387
04/16	14	Economic	Local	WIND	13	18

04/16	14	Economic	System	SOLR	10	
04/16	14	Economic	System	WIND	31	44
04/16	14	SelfSchCut	Local	SOLR	2	
04/16	15	Economic	Local	SOLR	1205	681
04/16	15	Economic	Local	WIND	17	
04/16	15	Economic	System	SOLR	1116	2207
04/16	15	Economic	System	WIND	97	159
04/16	15	SelfSchCut	Local	SOLR	2	
04/16	16	Economic	Local	SOLR	744	263
04/16	16	Economic	Local	WIND	20	
04/16	16	Economic	System	SOLR	2383	3509
04/16	16	Economic	System	WIND	181	249
04/16	17	Economic	Local	SOLR	286	464
04/16	17	Economic	System	SOLR	897	1855
04/16	17	Economic	System	WIND	133	148
04/16	17	SelfSchCut	Local	SOLR	0	
04/16	18	Economic	Local	SOLR	264	103
04/16	18	Economic	Local	WIND	15	
04/16	18	Economic	System	SOLR	185	764
04/16	18	Economic	System	WIND	47	141
04/16	19	Economic	Local	SOLR	12	87
04/16	19	Economic	Local	WIND	12	13
04/16	19	Economic	System	SOLR	2	23
04/16	20	Economic	Local	WIND	10	11
04/16	21	Economic	Local	WIND	10	10
04/16	22	Economic	Local	WIND	10	10
04/16	23	Economic	Local	WIND	10	11
04/16	24	Economic	Local	WIND	9	10

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.



California ISO