

Wind and Solar Curtailment April 18, 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.

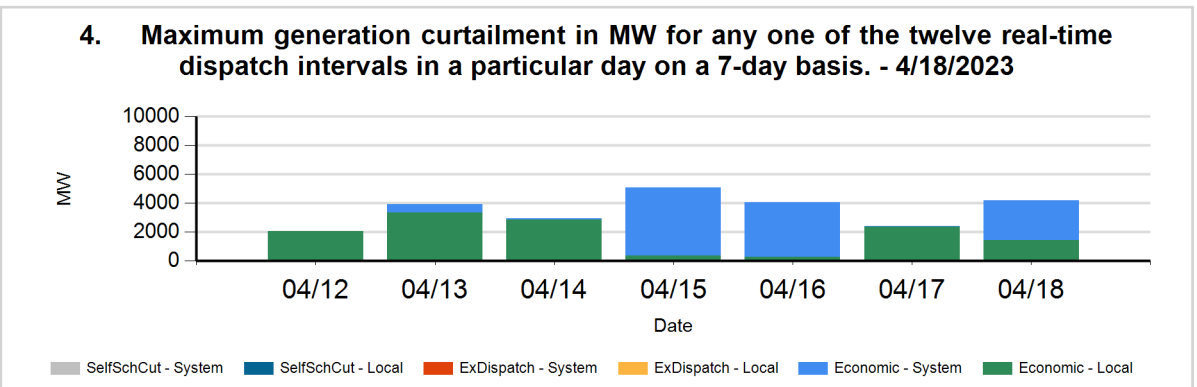
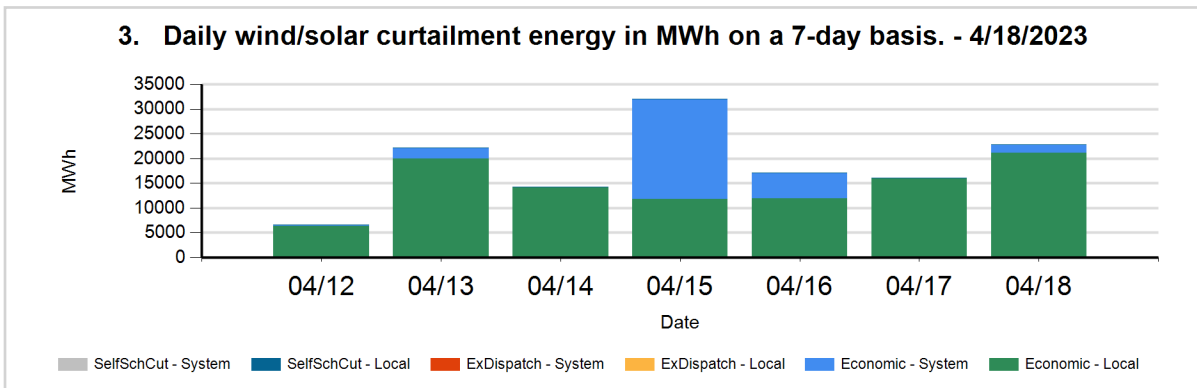
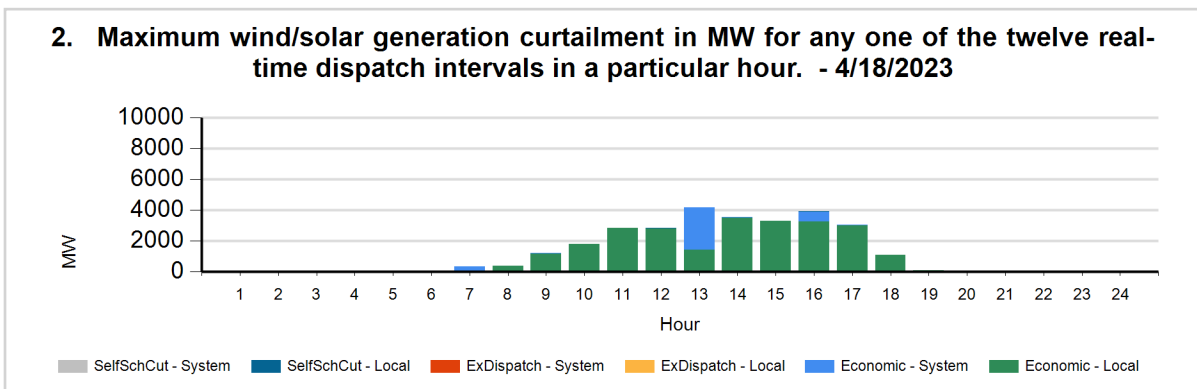
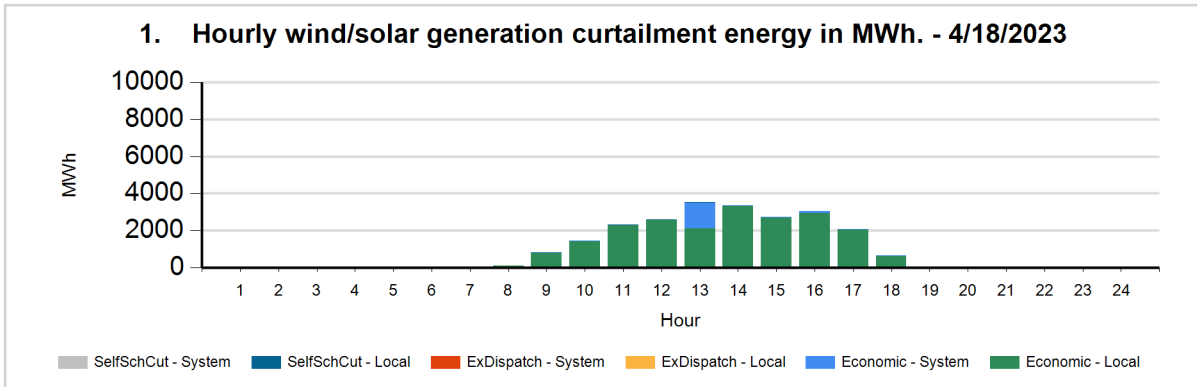
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

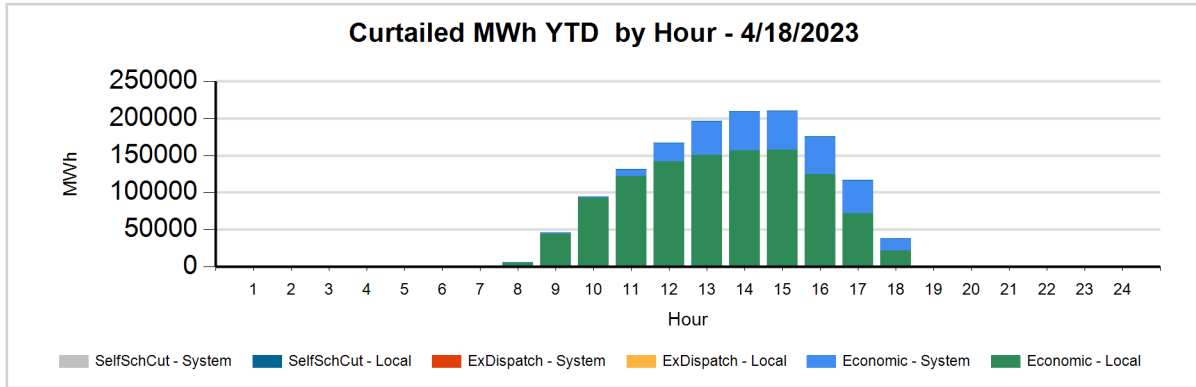
⁴For more information on oversupply conditions, please see:

https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

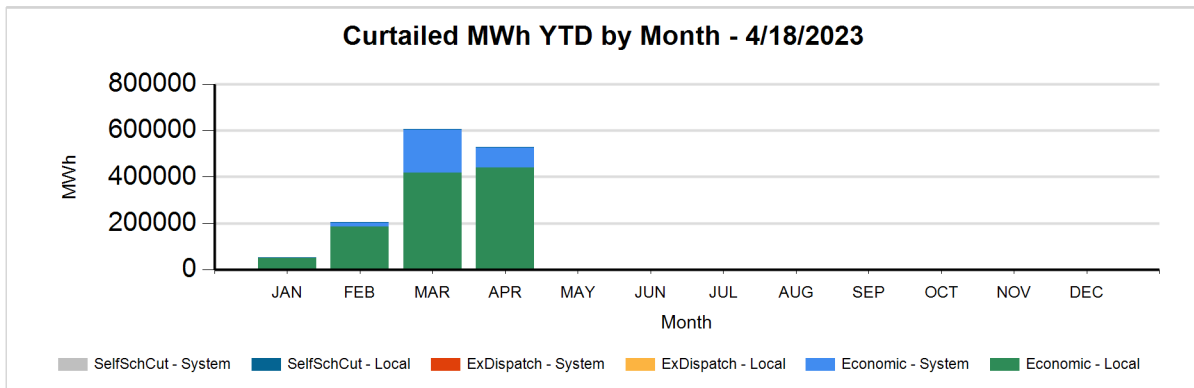
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/18/2023
LocalEconomic	1,091,323
LocalSelfSchCut	247
SystemEconomic	301,464
TOTAL	1,393,033

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/18	1	Economic	Local	WIND	14	24
04/18	1	Economic	System	WIND	4	
04/18	2	Economic	Local	WIND	24	25
04/18	3	Economic	Local	WIND	20	24
04/18	4	Economic	Local	WIND	2	
04/18	4	Economic	System	WIND	1	8
04/18	7	Economic	System	SOLR	26	306
04/18	7	Economic	System	WIND	2	20
04/18	8	Economic	Local	SOLR	114	368
04/18	9	Economic	Local	SOLR	799	1171
04/18	9	Economic	Local	WIND	3	7
04/18	9	Economic	System	SOLR	13	40
04/18	10	Economic	Local	SOLR	1389	1671
04/18	10	Economic	Local	WIND	31	119
04/18	10	Economic	System	SOLR	21	
04/18	11	Economic	Local	SOLR	2217	2766
04/18	11	Economic	Local	WIND	74	73
04/18	11	Economic	System	SOLR	11	
04/18	11	SelfSchCut	Local	SOLR	2	
04/18	12	Economic	Local	SOLR	2440	2681
04/18	12	Economic	Local	WIND	159	145
04/18	12	Economic	System	SOLR	7	
04/18	12	SelfSchCut	Local	SOLR	2	4
04/18	13	Economic	Local	SOLR	2049	1430
04/18	13	Economic	Local	WIND	73	
04/18	13	Economic	System	SOLR	1290	2358
04/18	13	Economic	System	WIND	97	395
04/18	13	SelfSchCut	Local	SOLR	1	
04/18	14	Economic	Local	SOLR	3175	3408
04/18	14	Economic	Local	WIND	130	146
04/18	14	Economic	System	SOLR	46	

04/18	14	Economic	System	WIND	2	3
04/18	14	SelfSchCut	Local	SOLR	0	
04/18	15	Economic	Local	SOLR	2554	3229
04/18	15	Economic	Local	WIND	156	83
04/18	15	Economic	System	SOLR	9	
04/18	15	SelfSchCut	Local	SOLR	0	
04/18	16	Economic	Local	SOLR	2705	3088
04/18	16	Economic	Local	WIND	219	182
04/18	16	Economic	System	SOLR	120	619
04/18	16	Economic	System	WIND	2	7
04/18	16	SelfSchCut	Local	SOLR	0	6
04/18	17	Economic	Local	SOLR	1924	2803
04/18	17	Economic	Local	WIND	139	195
04/18	17	Economic	System	SOLR	27	55
04/18	18	Economic	Local	SOLR	647	1058
04/18	18	Economic	Local	WIND	17	29
04/18	18	Economic	System	SOLR	5	
04/18	19	Economic	Local	SOLR	5	41
04/18	19	Economic	Local	WIND	22	22
04/18	19	Economic	System	SOLR	0	
04/18	20	Economic	Local	WIND	16	24
04/18	21	Economic	Local	WIND	22	25
04/18	22	Economic	Local	WIND	20	24
04/18	23	Economic	Local	WIND	9	21
04/18	23	Economic	System	WIND	1	
04/18	24	Economic	Local	WIND	20	25

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.

