

Wind and Solar Curtailment April 03, 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.

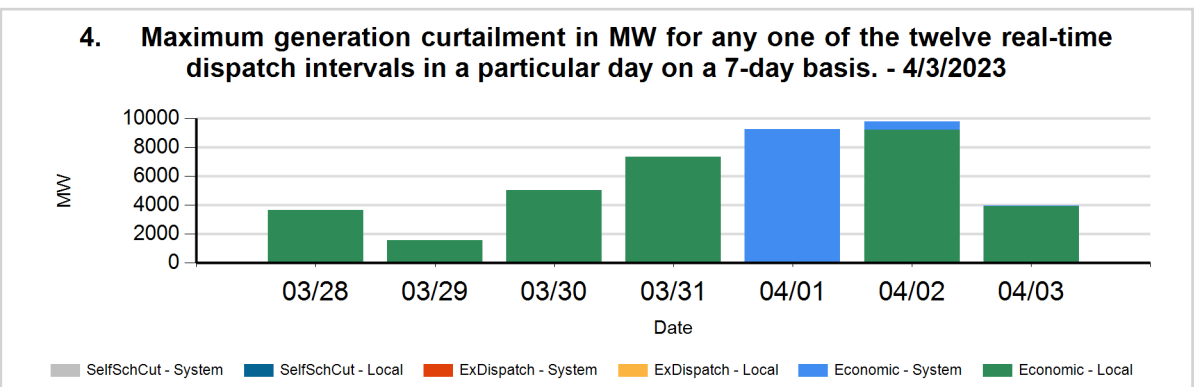
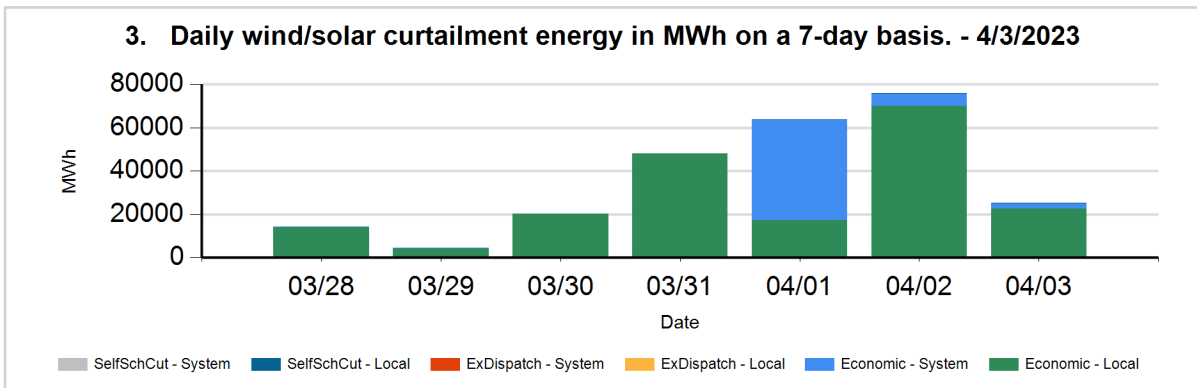
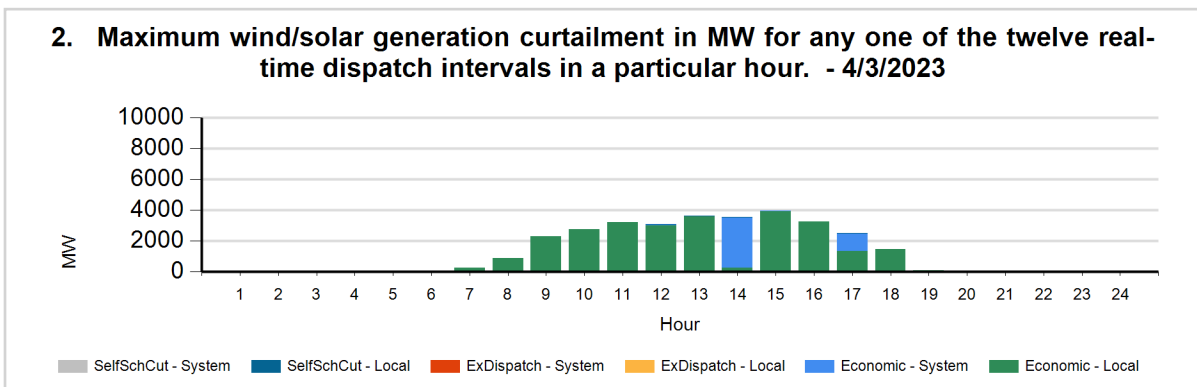
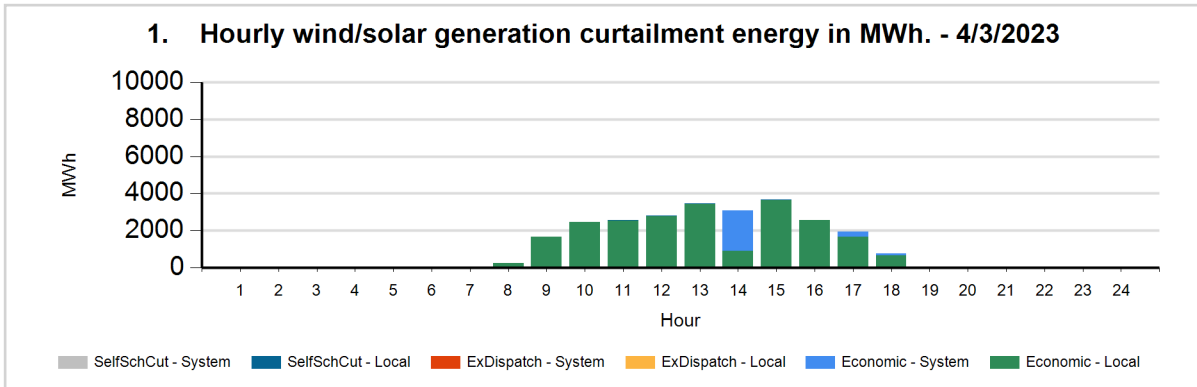
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

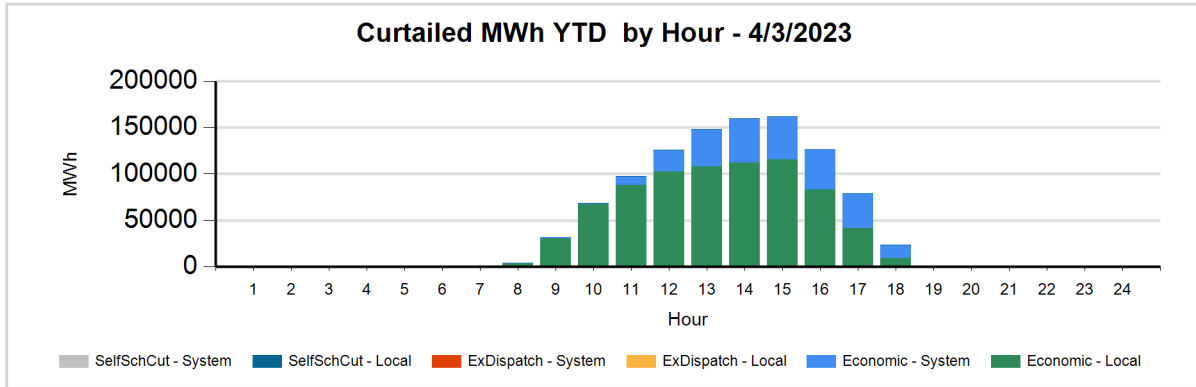
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

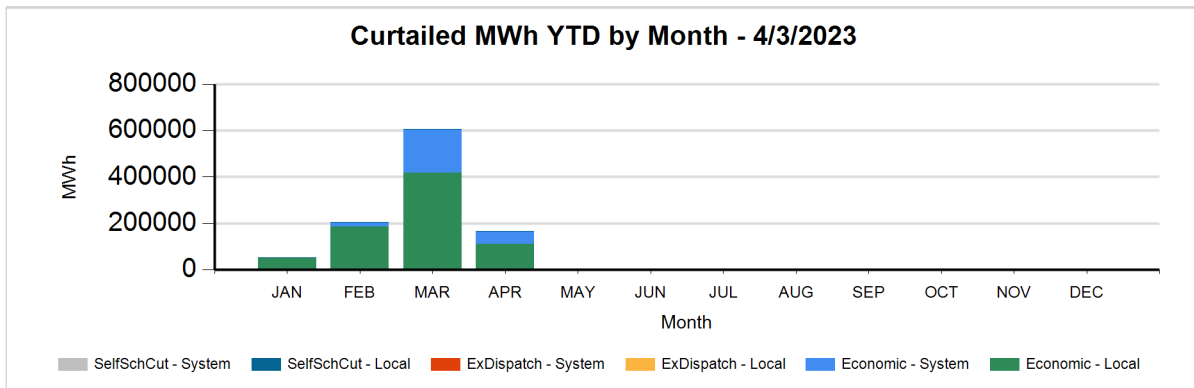
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/3/2023
LocalEconomic	761,916
LocalSelfSchCut	42
SystemEconomic	266,248
TOTAL	1,028,205

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/03	1	Economic	Local	WIND	2	
04/03	1	Economic	System	WIND	11	14
04/03	2	Economic	Local	WIND	4	14
04/03	2	Economic	System	WIND	11	
04/03	3	Economic	Local	WIND	2	
04/03	3	Economic	System	WIND	3	14
04/03	6	Economic	Local	WIND	1	
04/03	6	Economic	System	WIND	2	28
04/03	7	Economic	Local	WIND	32	235
04/03	8	Economic	Local	SOLR	219	858
04/03	8	Economic	Local	WIND	10	
04/03	8	Economic	System	SOLR	0	
04/03	9	Economic	Local	SOLR	1206	1837
04/03	9	Economic	Local	WIND	450	464
04/03	10	Economic	Local	SOLR	2112	2272
04/03	10	Economic	Local	WIND	349	480
04/03	11	Economic	Local	SOLR	2459	3201
04/03	11	Economic	Local	WIND	109	8
04/03	11	SelfSchCut	Local	SOLR	2	
04/03	12	Economic	Local	SOLR	2787	2988
04/03	12	Economic	Local	WIND	17	32
04/03	12	Economic	System	SOLR	7	60
04/03	12	Economic	System	WIND	1	
04/03	12	SelfSchCut	Local	SOLR	4	4
04/03	13	Economic	Local	SOLR	3420	3568
04/03	13	Economic	Local	WIND	21	30
04/03	13	Economic	System	SOLR	2	14
04/03	13	SelfSchCut	Local	SOLR	3	7
04/03	14	Economic	Local	SOLR	889	245
04/03	14	Economic	Local	WIND	6	
04/03	14	Economic	System	SOLR	2107	3118

04/03	14	Economic	System	WIND	66	198
04/03	14	SelfSchCut	Local	SOLR	0	1
04/03	15	Economic	Local	SOLR	3593	3763
04/03	15	Economic	Local	WIND	60	177
04/03	15	Economic	System	WIND	19	19
04/03	15	SelfSchCut	Local	SOLR	2	
04/03	16	Economic	Local	SOLR	2525	3234
04/03	16	Economic	Local	WIND	17	26
04/03	16	Economic	System	SOLR	0	
04/03	17	Economic	Local	SOLR	1667	1337
04/03	17	Economic	Local	WIND	5	
04/03	17	Economic	System	SOLR	247	1129
04/03	17	Economic	System	WIND	10	30
04/03	17	SelfSchCut	Local	SOLR	0	1
04/03	18	Economic	Local	SOLR	665	1445
04/03	18	Economic	System	SOLR	87	
04/03	18	Economic	System	WIND	3	
04/03	18	SelfSchCut	Local	SOLR	0	
04/03	19	Economic	Local	SOLR	12	62
04/03	19	Economic	System	SOLR	0	

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.