

Wind and Solar Curtailment April 19, 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.

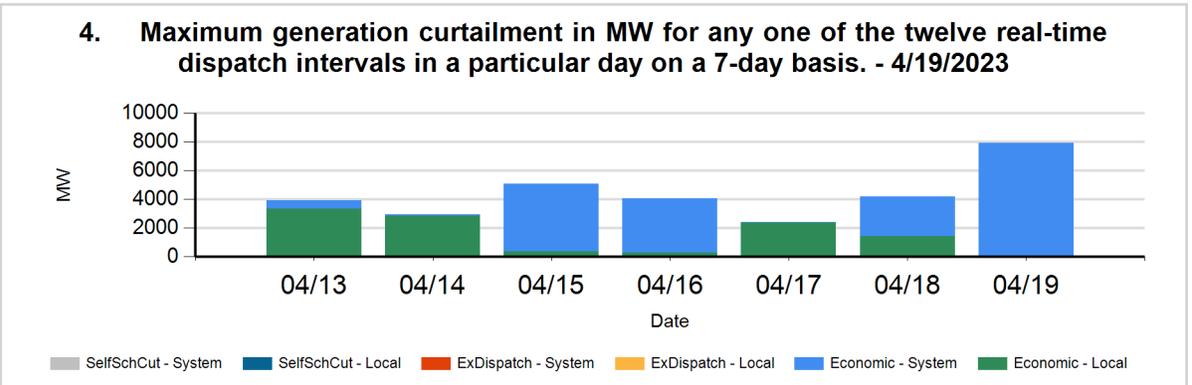
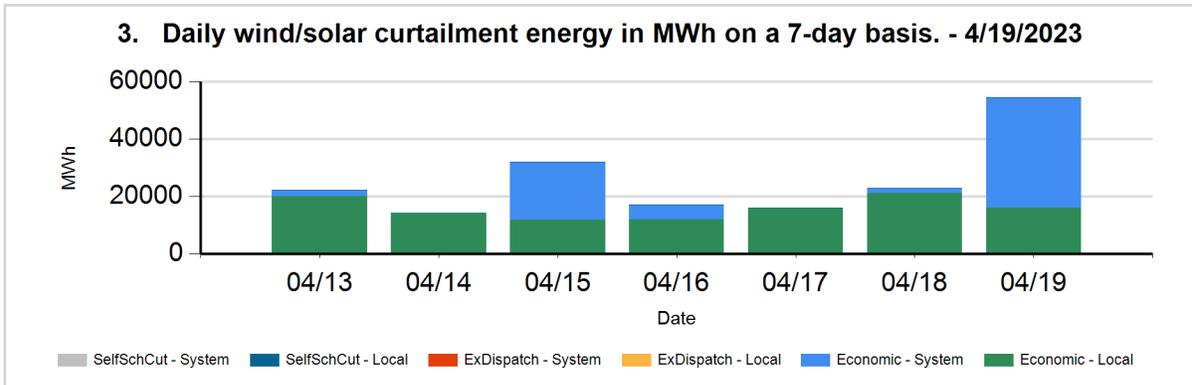
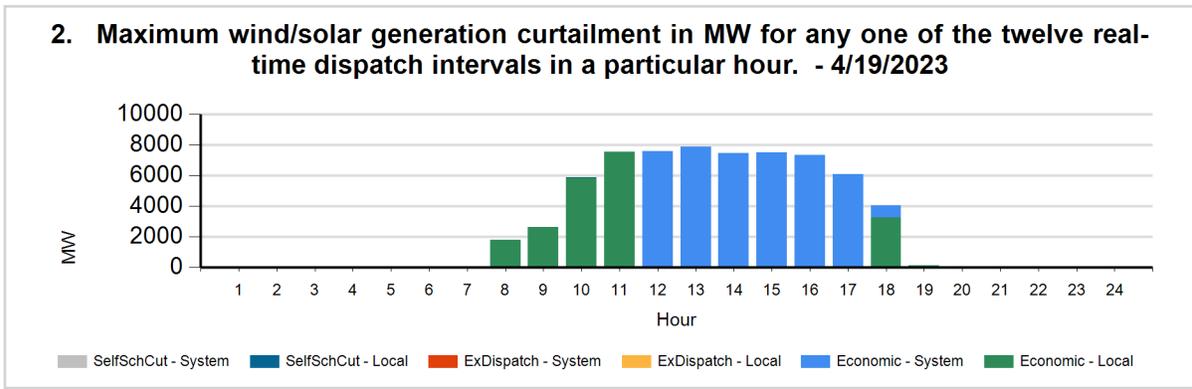
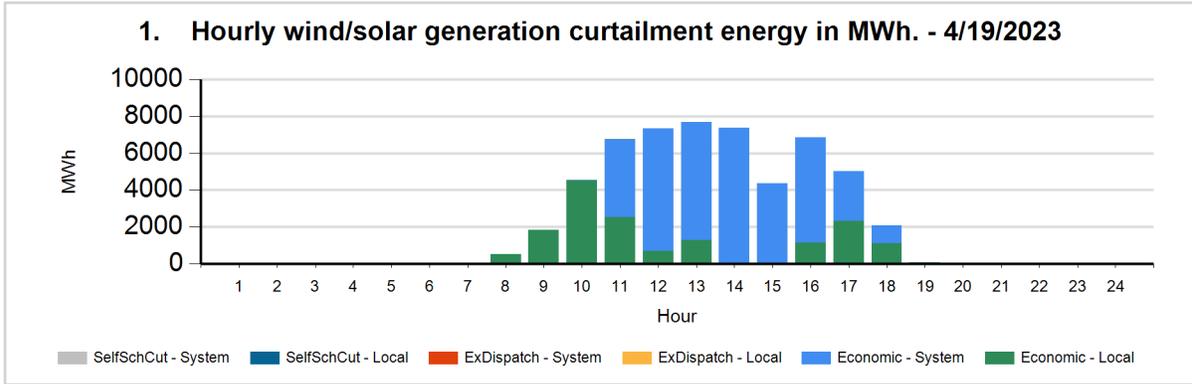
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

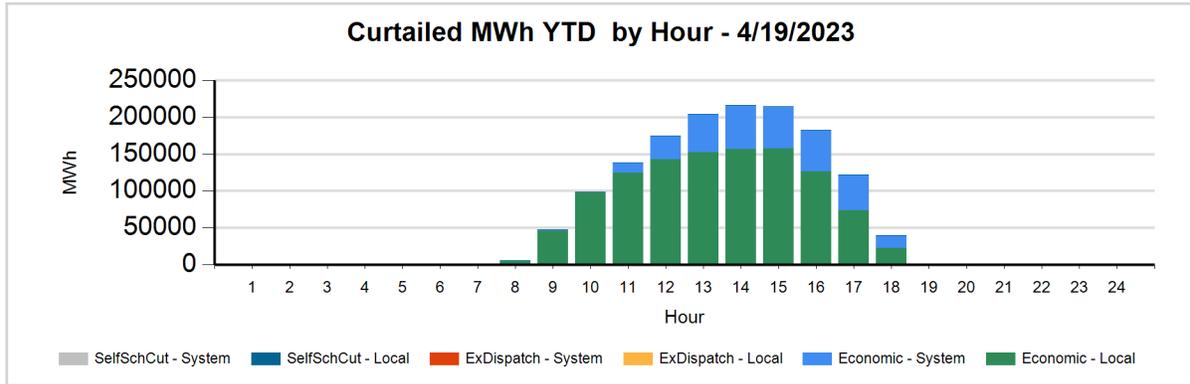
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

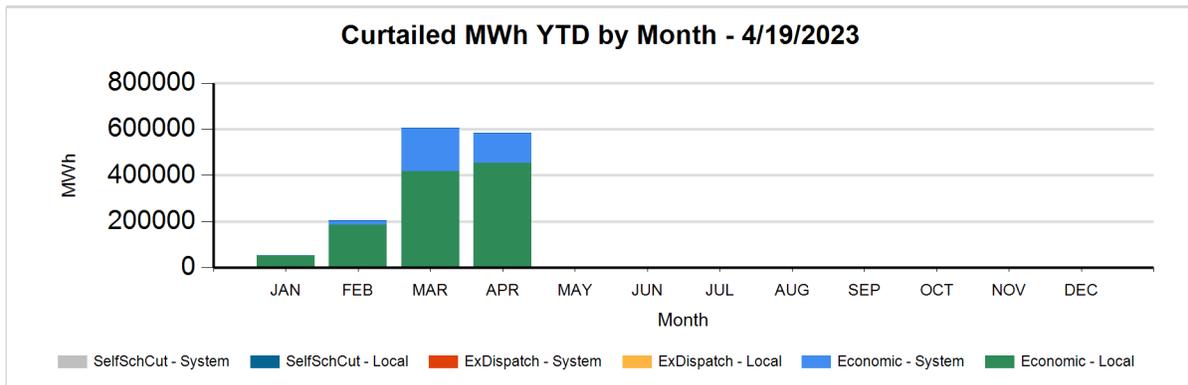
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/19/2023
LocalEconomic	1,107,322
LocalSelfSchCut	249
SystemEconomic	339,807
TOTAL	1,447,378

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/19	1	Economic	Local	WIND	2	19
04/19	1	Economic	System	WIND	2	
04/19	2	Economic	Local	WIND	18	20
04/19	3	Economic	Local	WIND	14	17
04/19	4	Economic	Local	WIND	12	16
04/19	5	Economic	Local	WIND	11	15
04/19	6	Economic	Local	WIND	5	16
04/19	7	Economic	Local	WIND	0	5
04/19	8	Economic	Local	SOLR	504	1744
04/19	8	Economic	Local	WIND	13	54
04/19	9	Economic	Local	SOLR	1743	2478
04/19	9	Economic	Local	WIND	81	154
04/19	10	Economic	Local	SOLR	4308	5517
04/19	10	Economic	Local	WIND	202	335
04/19	10	Economic	System	WIND	9	14
04/19	10	SelfSchCut	Local	SOLR	2	6
04/19	11	Economic	Local	SOLR	2424	7029
04/19	11	Economic	Local	WIND	113	528
04/19	11	Economic	System	SOLR	3848	
04/19	11	Economic	System	WIND	343	
04/19	11	SelfSchCut	Local	SOLR	1	
04/19	12	Economic	Local	SOLR	635	16
04/19	12	Economic	Local	WIND	45	
04/19	12	Economic	System	SOLR	6190	7086
04/19	12	Economic	System	WIND	470	499
04/19	13	Economic	Local	SOLR	1172	16
04/19	13	Economic	Local	WIND	91	
04/19	13	Economic	System	SOLR	5979	7350
04/19	13	Economic	System	WIND	437	537
04/19	14	Economic	Local	SOLR	14	
04/19	14	Economic	System	SOLR	6830	6944

04/19	14	Economic	System	WIND	512	520
04/19	15	Economic	Local	SOLR	9	15
04/19	15	Economic	System	SOLR	4051	7003
04/19	15	Economic	System	WIND	287	493
04/19	16	Economic	Local	SOLR	1069	19
04/19	16	Economic	Local	WIND	75	
04/19	16	Economic	System	SOLR	5346	6899
04/19	16	Economic	System	WIND	347	408
04/19	17	Economic	Local	SOLR	2171	22
04/19	17	Economic	Local	WIND	128	
04/19	17	Economic	System	SOLR	2487	5751
04/19	17	Economic	System	WIND	230	335
04/19	18	Economic	Local	SOLR	1004	2930
04/19	18	Economic	Local	WIND	87	305
04/19	18	Economic	System	SOLR	859	740
04/19	18	Economic	System	WIND	117	69
04/19	19	Economic	Local	SOLR	51	125

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.