

Wind and Solar Curtailment April 23, 2022

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.

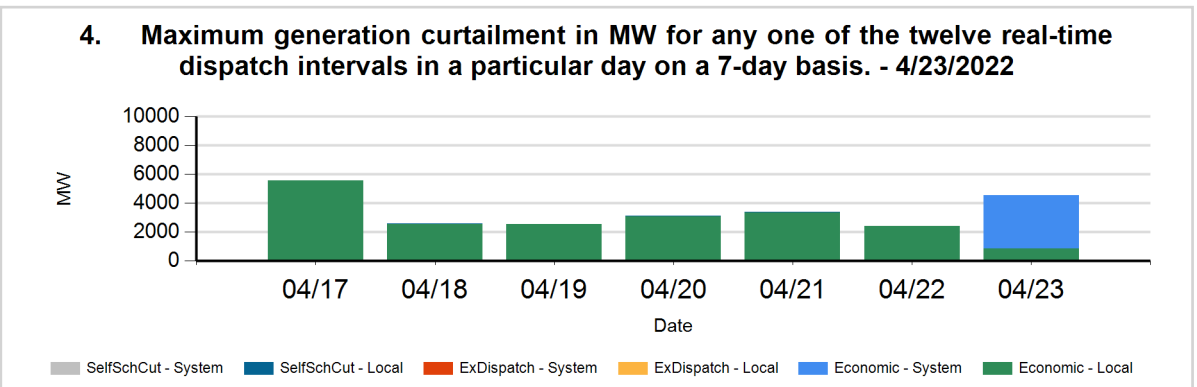
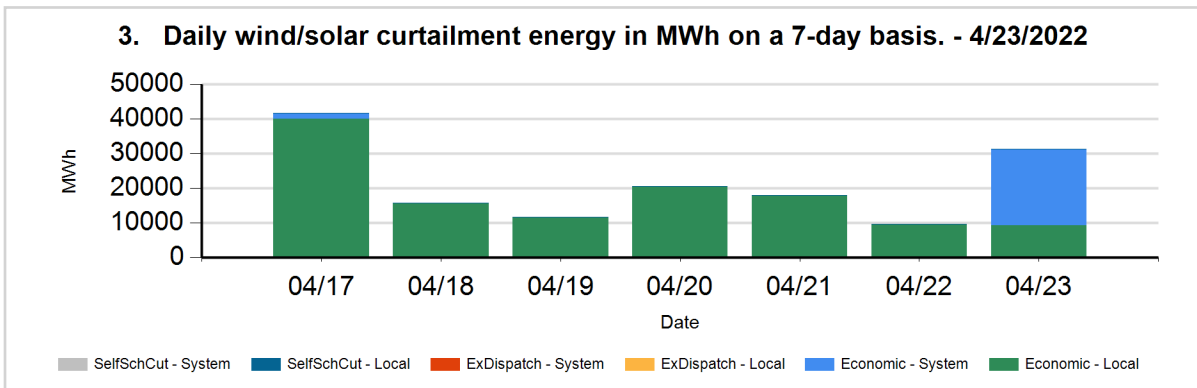
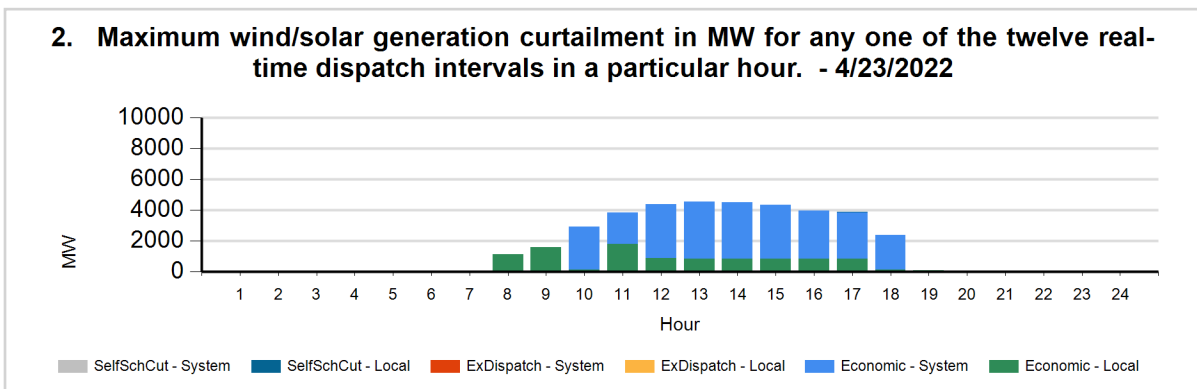
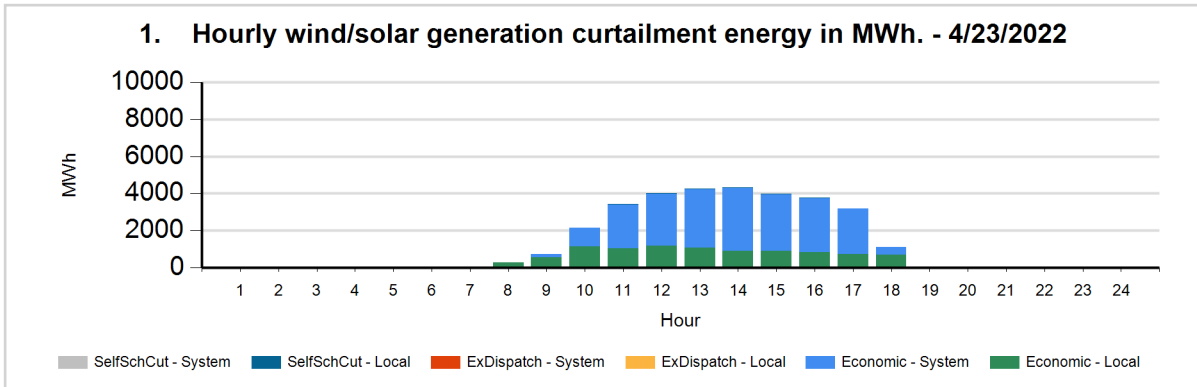
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

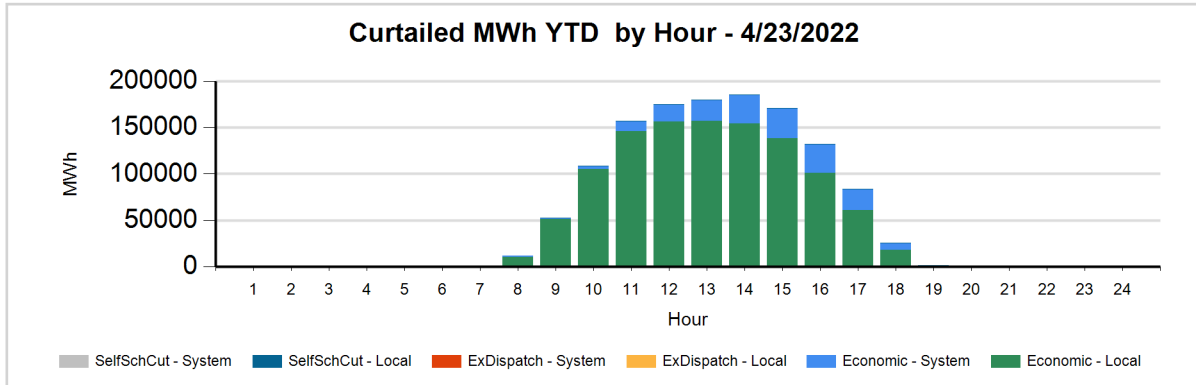
⁴For more information on oversupply conditions, please see:

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

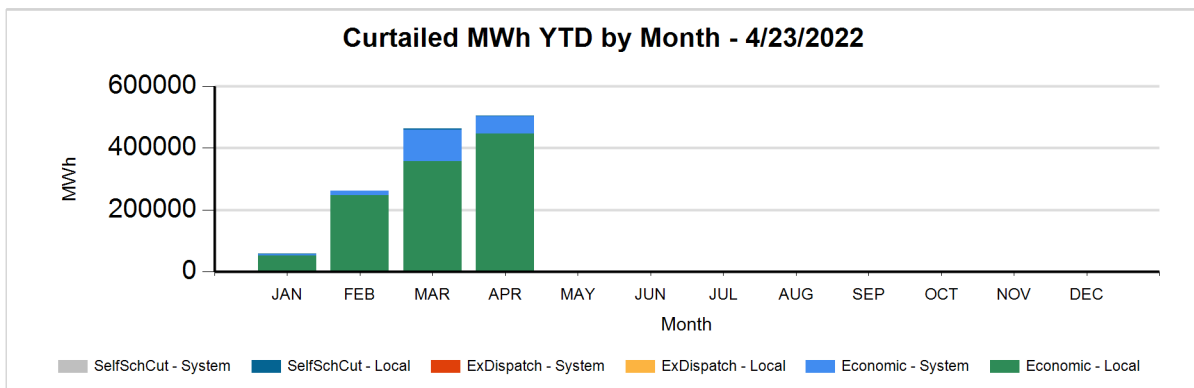
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/23/2022
LocalEconomic	1,100,800
LocalSelfSchCut	4,216
SystemEconomic	182,574
TOTAL	1,287,590

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/23	2	Economic	Local	WIND	0	1
04/23	2	Economic	System	WIND	0	
04/23	5	Economic	Local	WIND	0	1
04/23	7	Economic	Local	SOLR	1	14
04/23	8	Economic	Local	SOLR	284	1116
04/23	8	Economic	Local	WIND	1	4
04/23	9	Economic	Local	SOLR	556	1589
04/23	9	Economic	Local	WIND	3	4
04/23	9	Economic	System	SOLR	162	
04/23	9	Economic	System	WIND	2	
04/23	10	Economic	Local	SOLR	1134	123
04/23	10	Economic	System	SOLR	997	2775
04/23	10	Economic	System	WIND	3	
04/23	11	Economic	Local	SOLR	1019	1767
04/23	11	Economic	Local	WIND	9	22
04/23	11	Economic	System	SOLR	2302	1840
04/23	11	Economic	System	WIND	84	213
04/23	11	SelfSchCut	Local	SOLR	1	
04/23	12	Economic	Local	SOLR	1170	854
04/23	12	Economic	Local	WIND	2	
04/23	12	Economic	System	SOLR	2567	3274
04/23	12	Economic	System	WIND	258	263
04/23	12	SelfSchCut	Local	SOLR	3	
04/23	13	Economic	Local	SOLR	1053	846
04/23	13	Economic	Local	WIND	14	
04/23	13	Economic	System	SOLR	2960	3405
04/23	13	Economic	System	WIND	228	275
04/23	13	SelfSchCut	Local	SOLR	2	
04/23	14	Economic	Local	SOLR	909	840
04/23	14	Economic	Local	WIND	4	1
04/23	14	Economic	System	SOLR	3233	3474

04/23	14	Economic	System	WIND	188	189
04/23	14	SelfSchCut	Local	SOLR	3	
04/23	15	Economic	Local	SOLR	897	833
04/23	15	Economic	Local	WIND	3	
04/23	15	Economic	System	SOLR	2922	3350
04/23	15	Economic	System	WIND	162	172
04/23	15	SelfSchCut	Local	SOLR	5	
04/23	16	Economic	Local	SOLR	835	832
04/23	16	Economic	Local	WIND	1	
04/23	16	Economic	System	SOLR	2755	2944
04/23	16	Economic	System	WIND	179	167
04/23	16	SelfSchCut	Local	SOLR	2	
04/23	17	Economic	Local	SOLR	724	824
04/23	17	Economic	Local	WIND	2	
04/23	17	Economic	System	SOLR	2379	2888
04/23	17	Economic	System	WIND	67	166
04/23	17	SelfSchCut	Local	SOLR	0	1
04/23	18	Economic	Local	SOLR	695	114
04/23	18	Economic	Local	WIND	0	
04/23	18	Economic	System	SOLR	416	2228
04/23	18	Economic	System	WIND	9	16
04/23	19	Economic	Local	SOLR	15	80
04/23	19	Economic	System	SOLR	1	

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.