

Wind and Solar Curtailment April 27, 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.

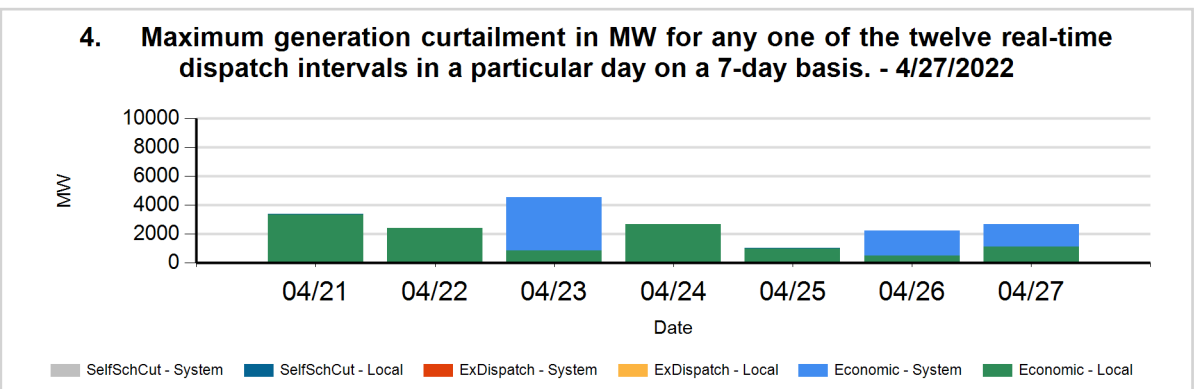
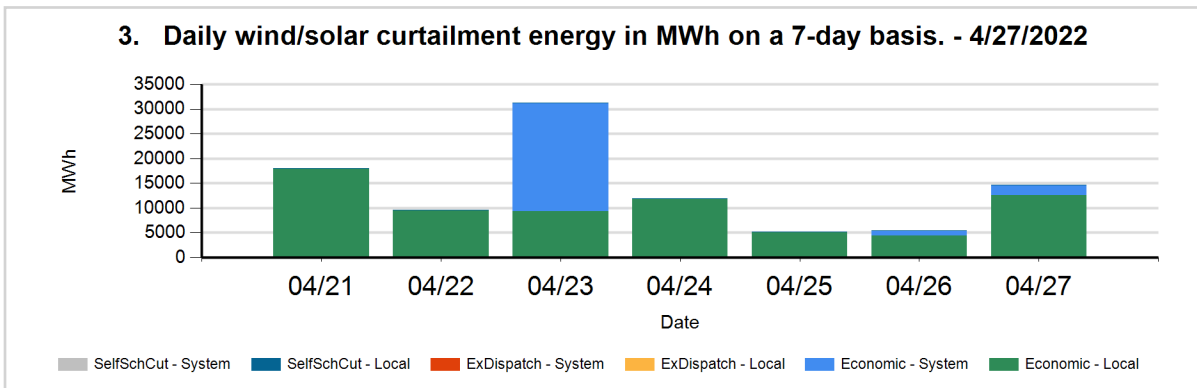
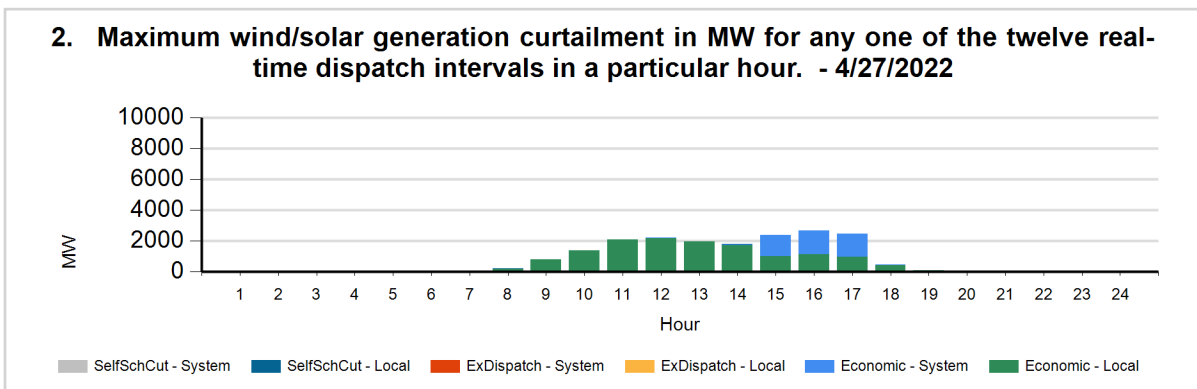
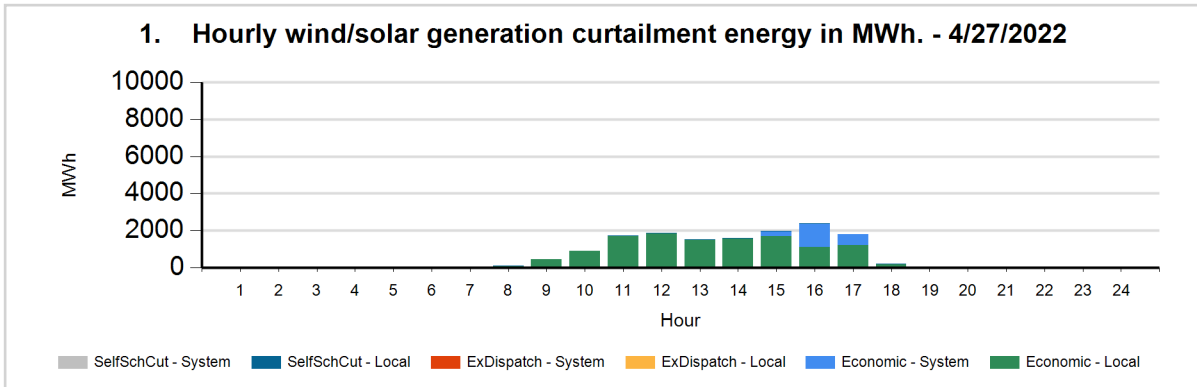
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

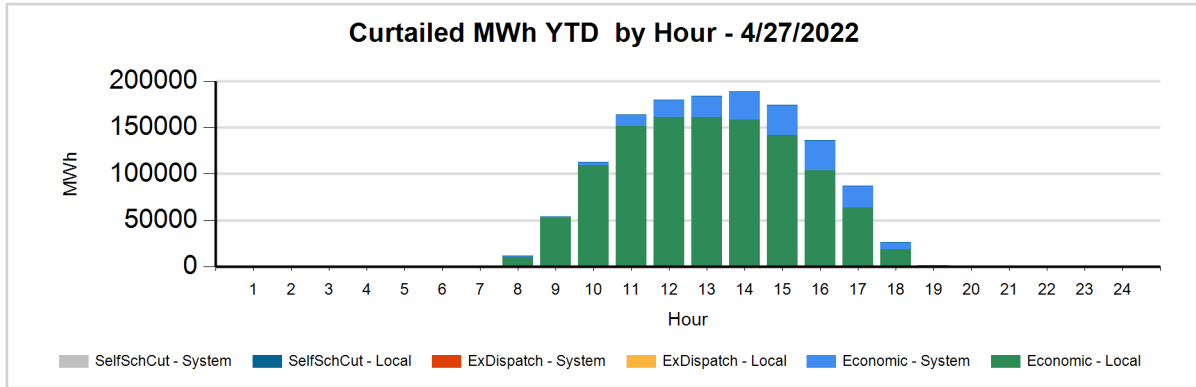
⁴For more information on oversupply conditions, please see:

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

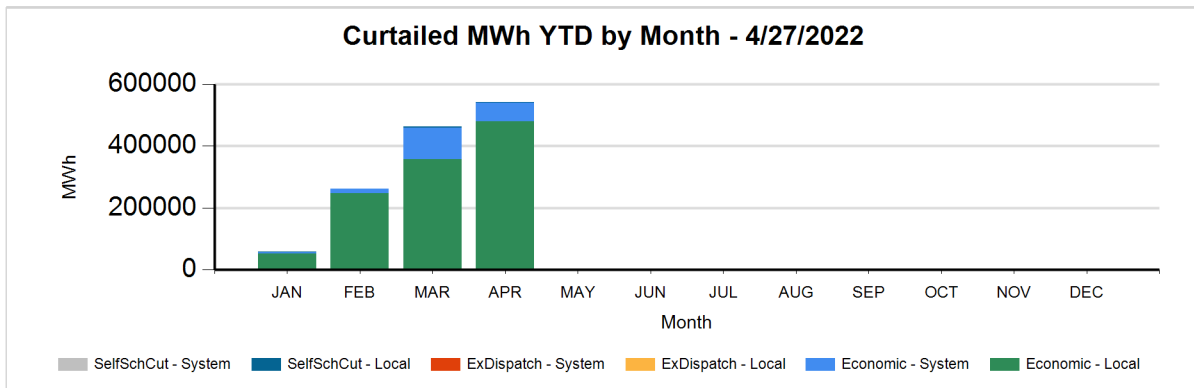
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/27/2022
LocalEconomic	1,134,854
LocalSelfSchCut	4,288
SystemEconomic	185,718
TOTAL	1,324,859

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/27	1	Economic	Local	WIND	6	17
04/27	2	Economic	Local	WIND	20	25
04/27	2	Economic	System	WIND	2	
04/27	3	Economic	Local	WIND	18	21
04/27	4	Economic	Local	WIND	12	13
04/27	5	Economic	Local	WIND	12	12
04/27	6	Economic	Local	WIND	12	12
04/27	7	Economic	Local	WIND	11	12
04/27	7	Economic	System	SOLR	2	25
04/27	8	Economic	Local	SOLR	40	77
04/27	8	Economic	Local	WIND	39	99
04/27	8	SelfSchCut	Local	SOLR	4	10
04/27	9	Economic	Local	SOLR	349	592
04/27	9	Economic	Local	WIND	83	181
04/27	10	Economic	Local	SOLR	786	1367
04/27	10	Economic	Local	WIND	100	12
04/27	11	Economic	Local	SOLR	1731	2075
04/27	11	Economic	Local	WIND	11	10
04/27	11	SelfSchCut	Local	SOLR	2	
04/27	12	Economic	Local	SOLR	1860	2190
04/27	12	Economic	Local	WIND	5	32
04/27	12	Economic	System	WIND	10	4
04/27	12	SelfSchCut	Local	SOLR	4	
04/27	13	Economic	Local	SOLR	1518	1945
04/27	13	Economic	Local	WIND	5	
04/27	13	Economic	System	WIND	4	
04/27	13	SelfSchCut	Local	SOLR	4	
04/27	14	Economic	Local	SOLR	1586	1748
04/27	14	Economic	Local	WIND	0	
04/27	14	Economic	System	WIND	9	10
04/27	14	SelfSchCut	Local	SOLR	4	16

04/27	15	Economic	Local	SOLR	1672	938
04/27	15	Economic	Local	WIND	37	69
04/27	15	Economic	System	SOLR	256	1369
04/27	15	Economic	System	WIND	4	5
04/27	15	SelfSchCut	Local	SOLR	2	
04/27	16	Economic	Local	SOLR	1013	1023
04/27	16	Economic	Local	WIND	85	98
04/27	16	Economic	System	SOLR	1261	1529
04/27	16	Economic	System	WIND	8	5
04/27	16	SelfSchCut	Local	SOLR	2	
04/27	17	Economic	Local	SOLR	1134	844
04/27	17	Economic	Local	WIND	86	92
04/27	17	Economic	System	SOLR	556	1522
04/27	17	Economic	System	WIND	5	20
04/27	18	Economic	Local	SOLR	195	431
04/27	18	Economic	Local	WIND	10	
04/27	18	Economic	System	SOLR	5	
04/27	18	Economic	System	WIND	2	15
04/27	18	SelfSchCut	Local	SOLR	3	
04/27	19	Economic	Local	SOLR	29	78
04/27	19	Economic	Local	WIND	11	10
04/27	19	Economic	System	SOLR	1	
04/27	20	Economic	Local	WIND	10	10
04/27	21	Economic	Local	WIND	9	9
04/27	22	Economic	Local	WIND	9	10
04/27	23	Economic	Local	WIND	7	10
04/27	24	Economic	Local	WIND	6	7

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.

