

Wind and Solar Curtailment April 27, 2024

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.

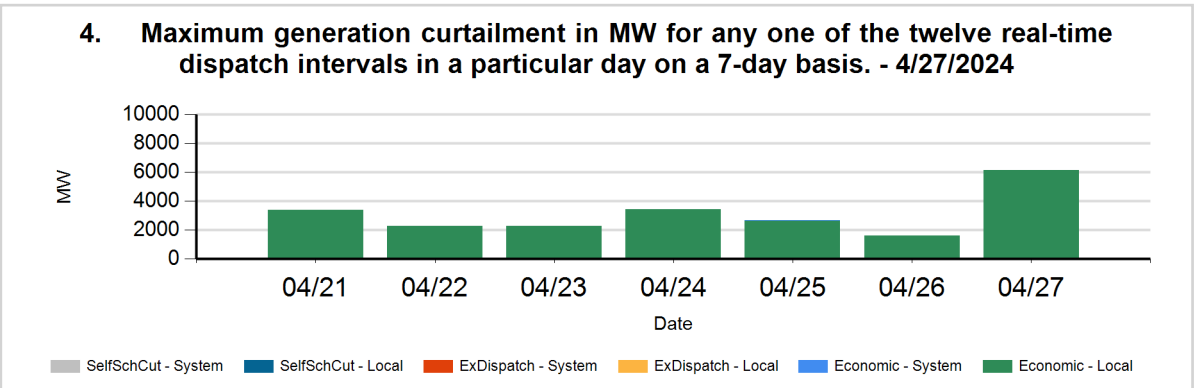
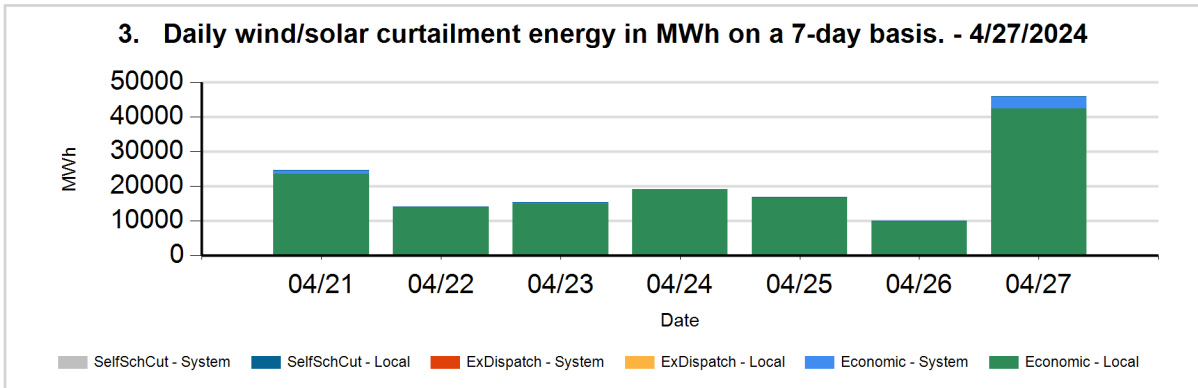
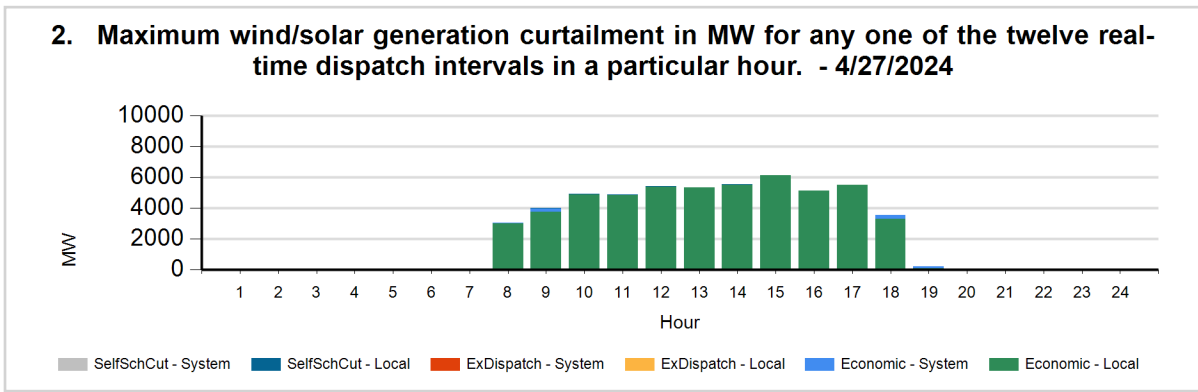
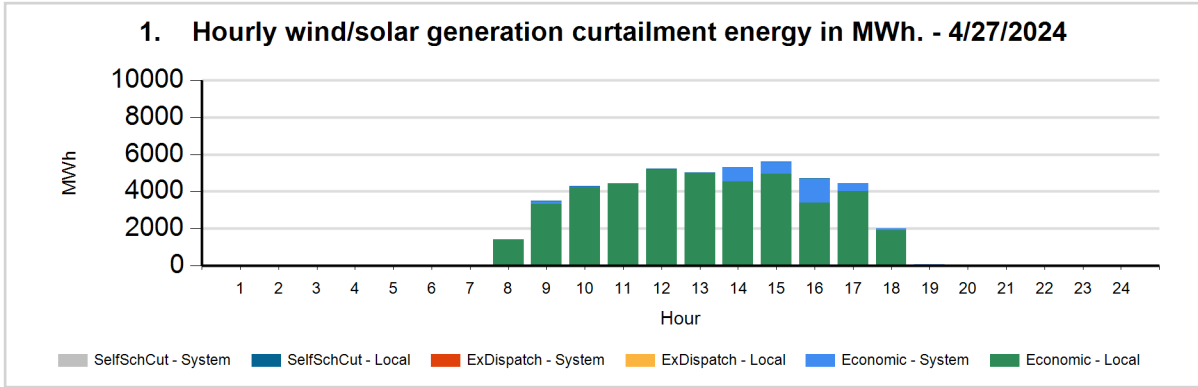
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

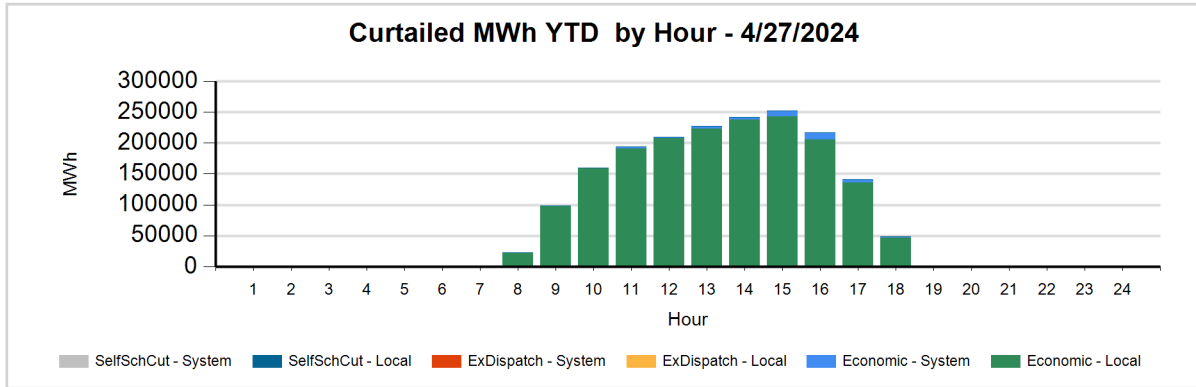
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

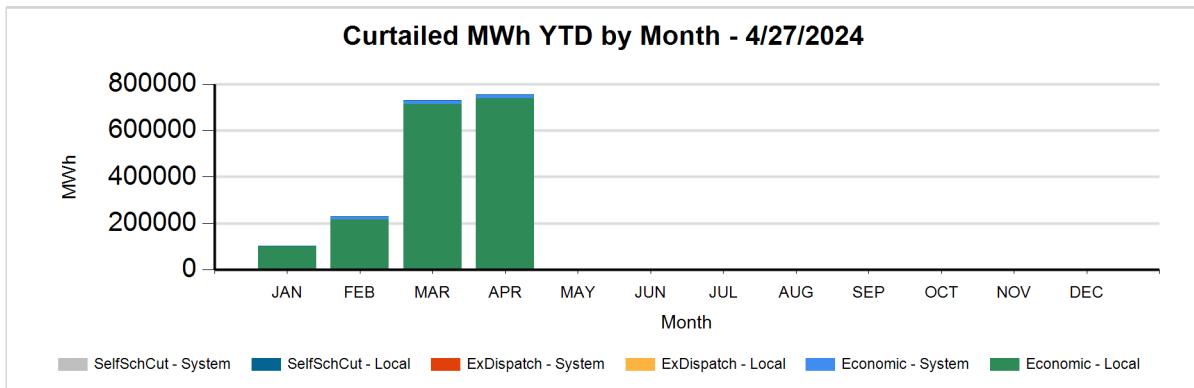
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/27/2024
LocalEconomic	1,770,632
LocalSelfSchCut	1,044
SystemEconomic	43,596
TOTAL	1,815,272

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/27	8	Economic	Local	SOLR	1221	2544
04/27	8	Economic	Local	WIND	178	465
04/27	8	Economic	System	SOLR	26	49
04/27	8	Economic	System	WIND	1	
04/27	9	Economic	Local	SOLR	2917	3261
04/27	9	Economic	Local	WIND	412	487
04/27	9	Economic	System	SOLR	142	247
04/27	9	Economic	System	WIND	4	4
04/27	9	SelfSchCut	Local	SOLR	1	3
04/27	10	Economic	Local	SOLR	3843	4467
04/27	10	Economic	Local	WIND	378	392
04/27	10	Economic	System	SOLR	60	
04/27	10	Economic	System	WIND	18	45
04/27	10	SelfSchCut	Local	SOLR	3	5
04/27	11	Economic	Local	SOLR	4072	4489
04/27	11	Economic	Local	WIND	328	364
04/27	11	Economic	System	WIND	32	24
04/27	11	SelfSchCut	Local	SOLR	4	4
04/27	12	Economic	Local	SOLR	4746	4971
04/27	12	Economic	Local	WIND	458	460
04/27	12	Economic	System	SOLR	4	5
04/27	12	Economic	System	WIND	5	3
04/27	12	SelfSchCut	Local	SOLR	4	1
04/27	13	Economic	Local	SOLR	4591	4898
04/27	13	Economic	Local	WIND	435	456
04/27	13	Economic	System	SOLR	0	
04/27	13	Economic	System	WIND	1	
04/27	13	SelfSchCut	Local	SOLR	4	
04/27	14	Economic	Local	SOLR	4129	4982
04/27	14	Economic	Local	WIND	407	524
04/27	14	Economic	System	SOLR	657	5

04/27	14	Economic	System	WIND	96	17
04/27	14	SelfSchCut	Local	SOLR	3	10
04/27	15	Economic	Local	SOLR	4446	5549
04/27	15	Economic	Local	WIND	509	594
04/27	15	Economic	System	SOLR	570	
04/27	15	Economic	System	WIND	60	
04/27	15	SelfSchCut	Local	SOLR	4	
04/27	16	Economic	Local	SOLR	2953	4486
04/27	16	Economic	Local	WIND	429	642
04/27	16	Economic	System	SOLR	1142	
04/27	16	Economic	System	WIND	189	
04/27	16	SelfSchCut	Local	SOLR	1	
04/27	17	Economic	Local	SOLR	3477	4724
04/27	17	Economic	Local	WIND	544	764
04/27	17	Economic	System	SOLR	321	
04/27	17	Economic	System	WIND	69	
04/27	17	SelfSchCut	Local	SOLR	1	
04/27	18	Economic	Local	SOLR	1673	2789
04/27	18	Economic	Local	WIND	212	488
04/27	18	Economic	System	SOLR	112	249
04/27	18	Economic	System	WIND	12	14
04/27	19	Economic	Local	SOLR	38	70
04/27	19	Economic	System	SOLR	15	131

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.