

## Wind and Solar Curtailment April 15, 2024

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why<sup>1</sup>. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation<sup>2</sup>.

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion<sup>3</sup>.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply<sup>4</sup>.
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.

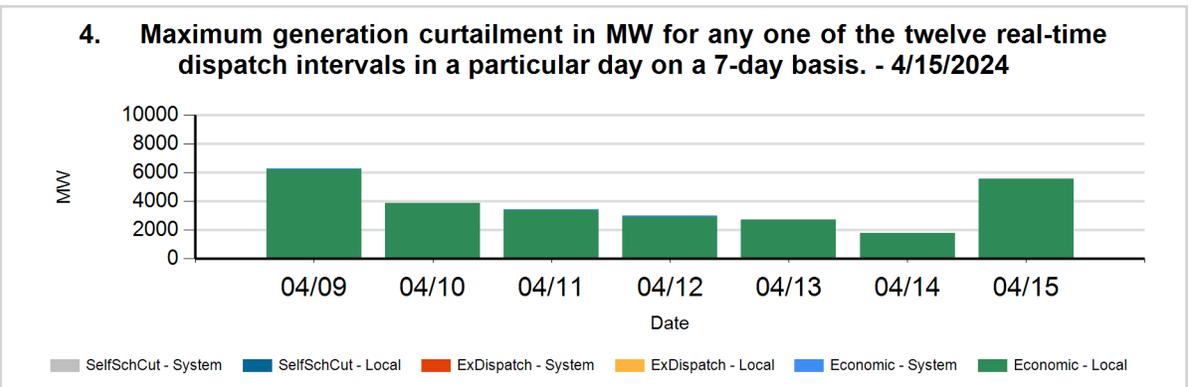
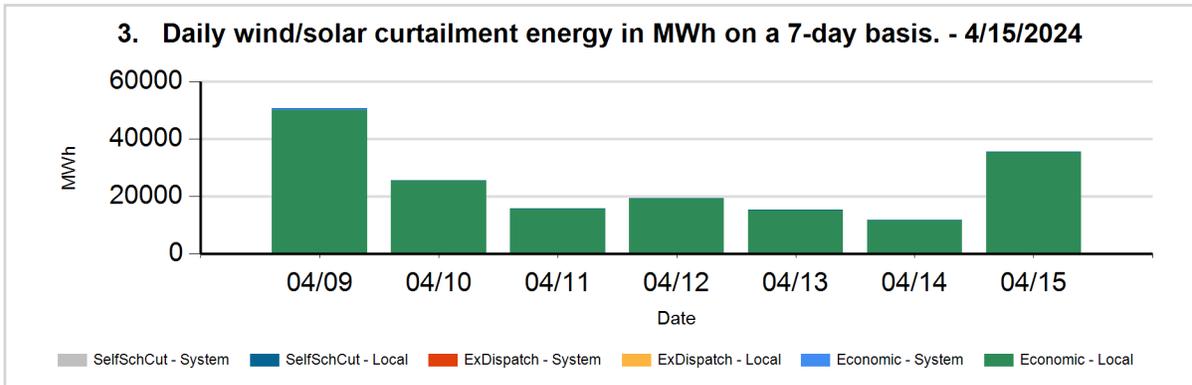
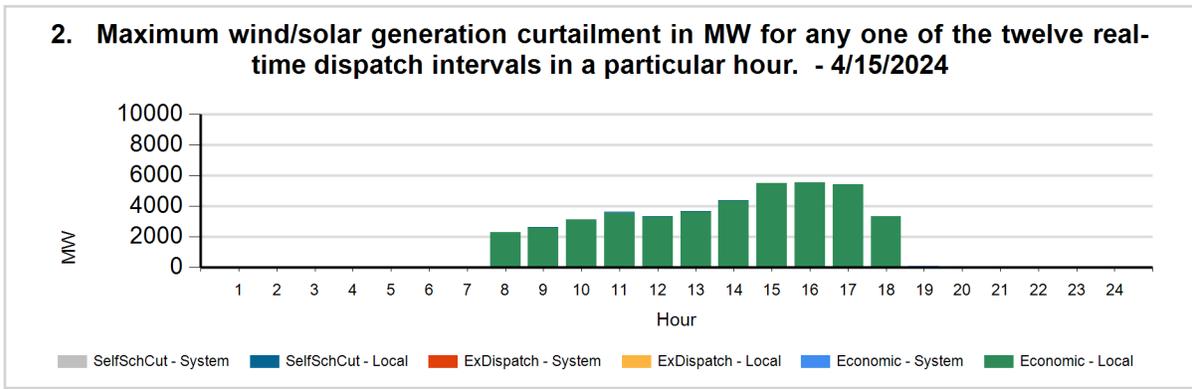
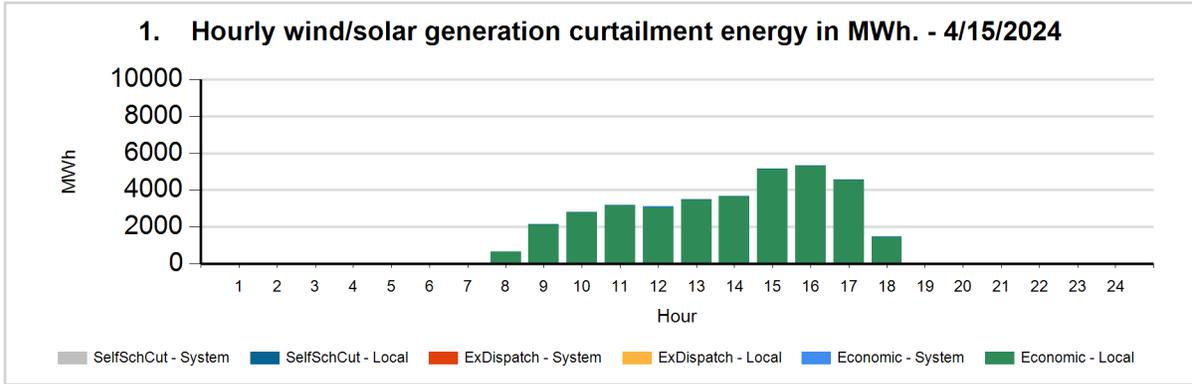
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

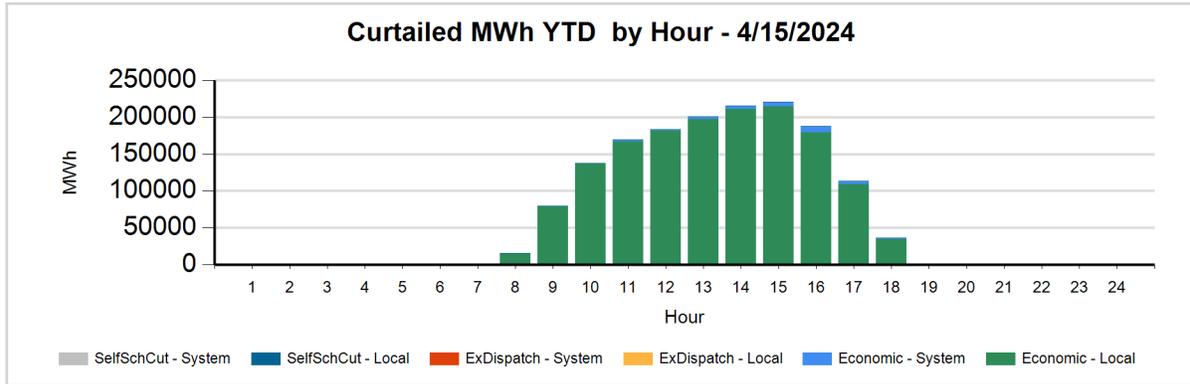
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<sup>4</sup>For more information on oversupply conditions, please see: [https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf)

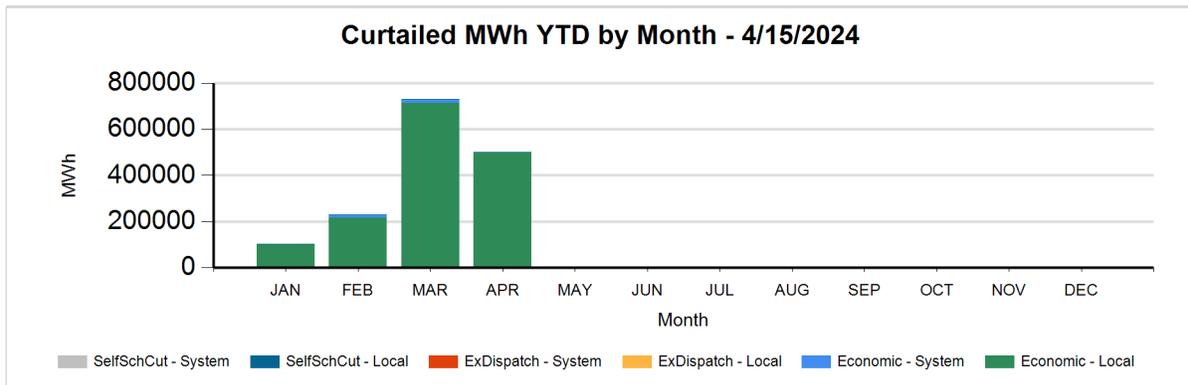
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/15/2024
LocalEconomic	1,527,612
LocalSelfSchCut	852
SystemEconomic	33,377
<b>TOTAL</b>	<b>1,561,841</b>

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/15	8	Economic	Local	SOLR	614	2128
04/15	8	Economic	Local	WIND	47	174
04/15	8	Economic	System	SOLR	0	
04/15	9	Economic	Local	SOLR	1959	2366
04/15	9	Economic	Local	WIND	159	224
04/15	9	SelfSchCut	Local	SOLR	10	13
04/15	10	Economic	Local	SOLR	2675	2911
04/15	10	Economic	Local	WIND	121	200
04/15	10	SelfSchCut	Local	SOLR	3	
04/15	11	Economic	Local	SOLR	2799	3110
04/15	11	Economic	Local	WIND	368	449
04/15	11	Economic	System	SOLR	23	43
04/15	11	SelfSchCut	Local	SOLR	7	12
04/15	12	Economic	Local	SOLR	2674	2881
04/15	12	Economic	Local	WIND	388	399
04/15	12	Economic	System	SOLR	26	64
04/15	12	SelfSchCut	Local	SOLR	7	8
04/15	13	Economic	Local	SOLR	3202	3307
04/15	13	Economic	Local	WIND	286	362
04/15	13	Economic	System	SOLR	3	
04/15	13	SelfSchCut	Local	SOLR	3	10
04/15	14	Economic	Local	SOLR	3459	4158
04/15	14	Economic	Local	WIND	220	236
04/15	14	SelfSchCut	Local	SOLR	3	1
04/15	15	Economic	Local	SOLR	4889	5220
04/15	15	Economic	Local	WIND	250	271
04/15	15	SelfSchCut	Local	SOLR	1	
04/15	16	Economic	Local	SOLR	4967	5246
04/15	16	Economic	Local	WIND	334	320
04/15	16	Economic	System	SOLR	30	
04/15	16	SelfSchCut	Local	SOLR	2	

04/15	17	Economic	Local	SOLR	4255	5114
04/15	17	Economic	Local	WIND	304	322
04/15	17	Economic	System	SOLR	11	
04/15	17	SelfSchCut	Local	SOLR	2	
04/15	18	Economic	Local	SOLR	1306	3101
04/15	18	Economic	Local	WIND	138	240
04/15	18	Economic	System	SOLR	54	
04/15	18	SelfSchCut	Local	SOLR	0	
04/15	19	Economic	Local	SOLR	29	66
04/15	19	Economic	Local	WIND	2	
04/15	19	Economic	System	SOLR	1	6

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](mailto:ShortTermForecasting@caiso.com).