

## Wind and Solar Curtailment April 20, 2022

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.

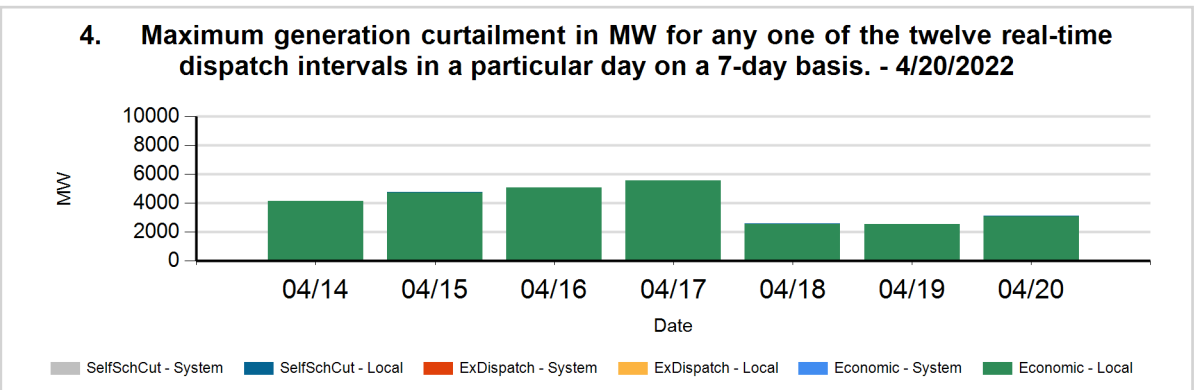
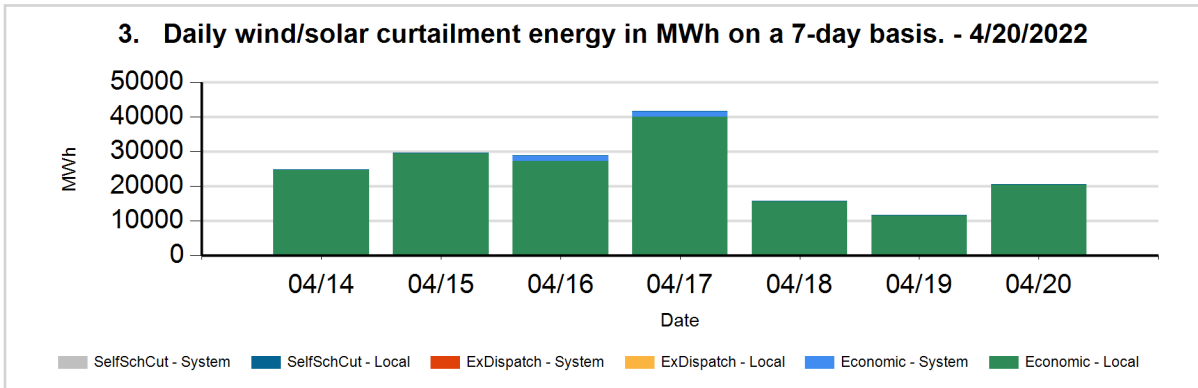
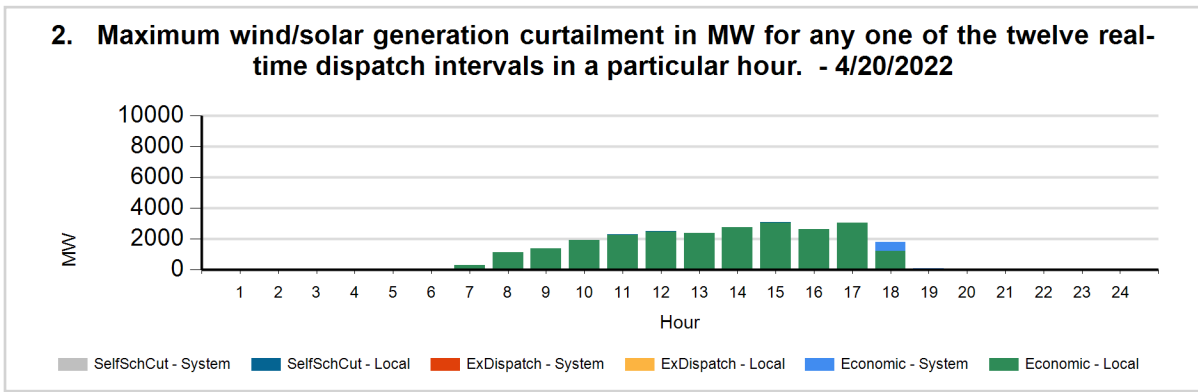
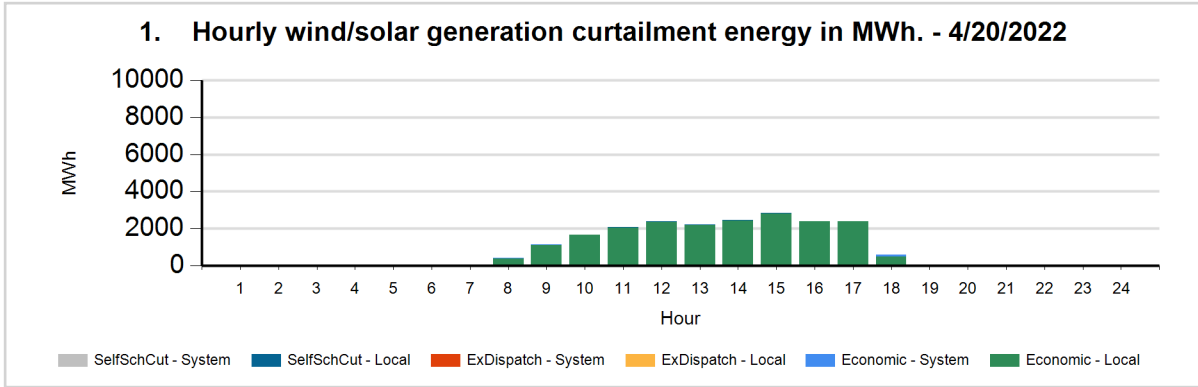
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

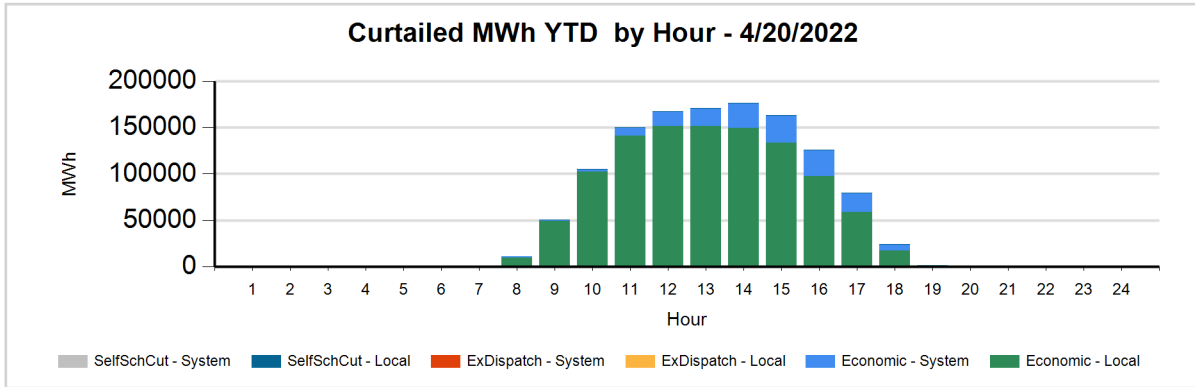
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

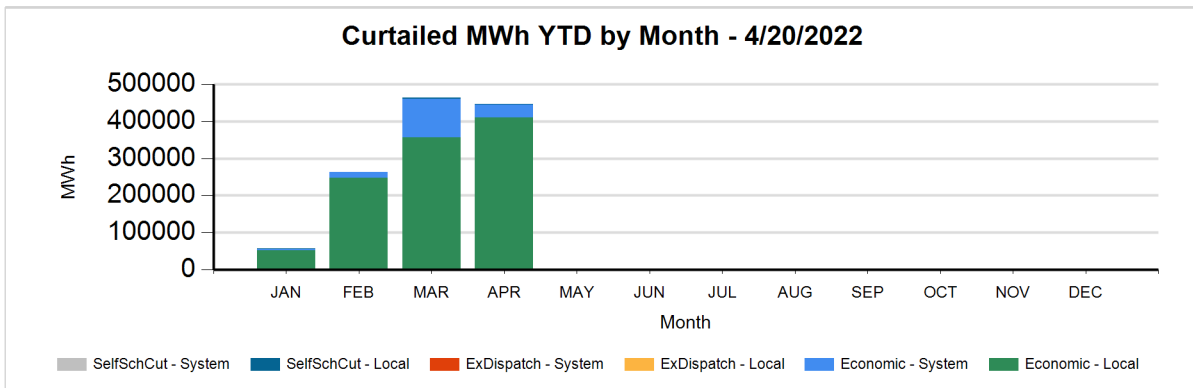
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/20/2022
LocalEconomic	1,063,928
LocalSelfSchCut	4,170
SystemEconomic	160,650
TOTAL	1,228,748

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/20	7	Economic	Local	SOLR	7	84
04/20	7	Economic	Local	WIND	21	215
04/20	8	Economic	Local	SOLR	242	769
04/20	8	Economic	Local	WIND	180	343
04/20	8	Economic	System	SOLR	3	
04/20	9	Economic	Local	SOLR	881	1146
04/20	9	Economic	Local	WIND	269	222
04/20	9	Economic	System	SOLR	1	
04/20	10	Economic	Local	SOLR	1473	1790
04/20	10	Economic	Local	WIND	170	138
04/20	11	Economic	Local	SOLR	1847	2020
04/20	11	Economic	Local	WIND	187	241
04/20	11	SelfSchCut	Local	SOLR	49	48
04/20	12	Economic	Local	SOLR	2150	2283
04/20	12	Economic	Local	WIND	220	172
04/20	12	SelfSchCut	Local	SOLR	29	38
04/20	13	Economic	Local	SOLR	1975	2138
04/20	13	Economic	Local	WIND	234	250
04/20	13	SelfSchCut	Local	SOLR	2	
04/20	14	Economic	Local	SOLR	2205	2500
04/20	14	Economic	Local	WIND	249	249
04/20	14	SelfSchCut	Local	SOLR	6	
04/20	15	Economic	Local	SOLR	2532	2785
04/20	15	Economic	Local	WIND	291	307
04/20	15	SelfSchCut	Local	SOLR	4	7
04/20	16	Economic	Local	SOLR	2124	2374
04/20	16	Economic	Local	WIND	251	259
04/20	17	Economic	Local	SOLR	2067	2804
04/20	17	Economic	Local	WIND	318	257
04/20	18	Economic	Local	SOLR	386	926
04/20	18	Economic	Local	WIND	85	291

04/20	18	Economic	System	SOLR	111	531
04/20	18	Economic	System	WIND	10	26
04/20	19	Economic	Local	SOLR	18	33
04/20	19	Economic	System	SOLR	9	66

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).