

## Wind and Solar Curtailment April 08, 2023

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

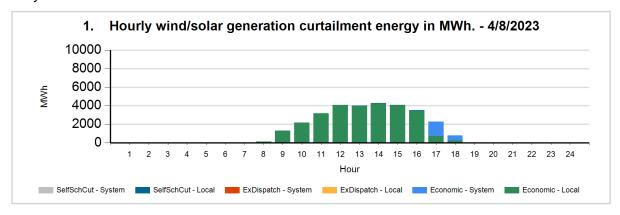
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

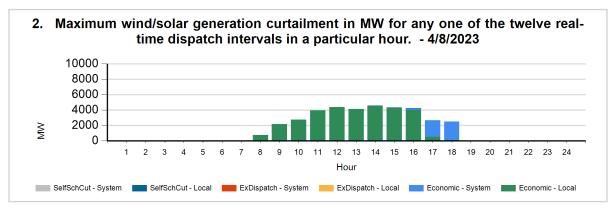
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

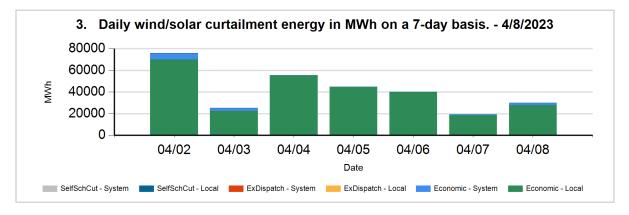
For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables FastFacts.pdf

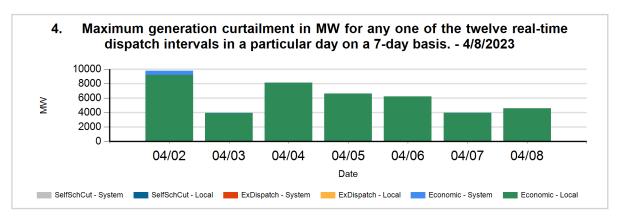


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



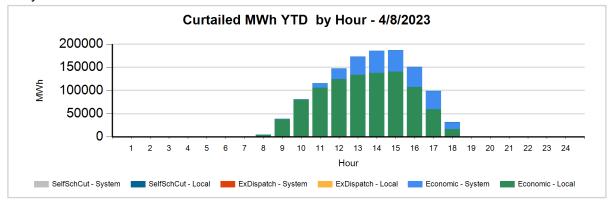




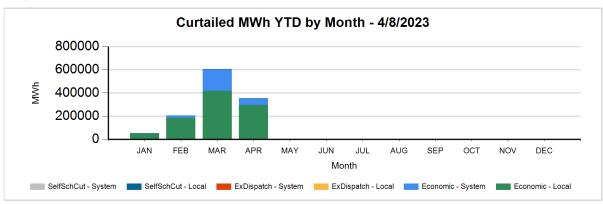




The following charts show hourly year to date wind and solar curtailment by category, if any.



The following charts show monthly year to date wind and solar curtailment by category, if any.



TYPE	YTD CURTAILED MWH - 4/8/2023
LocalEconomic	947,721
LocalSelfSchCut	103
SystemEconomic	269,696
TOTAL	1,217,521



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/08	8	Economic	Local	SOLR	116	692
04/08	8	Economic	Local	WIND	9	57
04/08	9	Economic	Local	SOLR	1208	2038
04/08	9	Economic	Local	WIND	100	134
04/08	10	Economic	Local	SOLR	2070	2598
04/08	10	Economic	Local	WIND	115	140
04/08	10	SelfSchCut	Local	SOLR	0	
04/08	11	Economic	Local	SOLR	3059	3803
04/08	11	Economic	Local	WIND	140	149
04/08	11	SelfSchCut	Local	SOLR	0	
04/08	12	Economic	Local	SOLR	3945	4201
04/08	12	Economic	Local	WIND	140	184
04/08	12	SelfSchCut	Local	SOLR	0	
04/08	13	Economic	Local	SOLR	3890	3979
04/08	13	Economic	Local	WIND	135	160
04/08	13	SelfSchCut	Local	SOLR	2	
04/08	14	Economic	Local	SOLR	4156	4295
04/08	14	Economic	Local	WIND	135	286
04/08	14	SelfSchCut	Local	SOLR	3	
04/08	15	Economic	Local	SOLR	3758	3902
04/08	15	Economic	Local	WIND	304	441
04/08	15	SelfSchCut	Local	SOLR	2	8
04/08	16	Economic	Local	SOLR	3185	3574
04/08	16	Economic	Local	WIND	285	443
04/08	16	Economic	System	SOLR	63	231
04/08	16	SelfSchCut	Local	SOLR	1	1
04/08	17	Economic	Local	SOLR	684	480
04/08	17	Economic	Local	WIND	41	
04/08	17	Economic	System	SOLR	1432	2056
04/08	17	Economic	System	WIND	120	147
04/08	18	Economic	Local	SOLR	220	82



04/08	18	Economic	Local	WIND	25	
04/08	18	Economic	System	SOLR	495	2243
04/08	18	Economic	System	WIND	44	179
04/08	19	Economic	Local	SOLR	3	24

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.