

## Wind and Solar Curtailment June 12, 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.

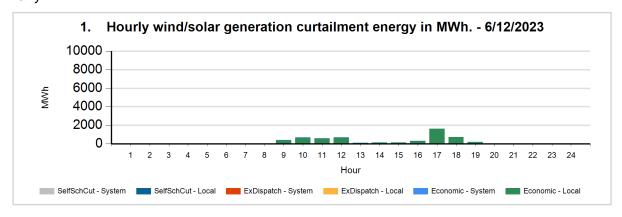
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

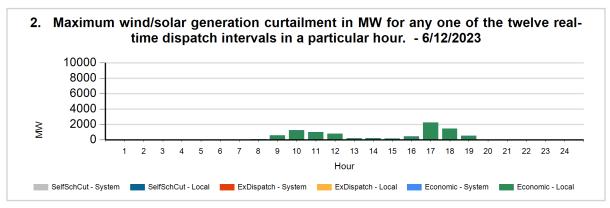
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

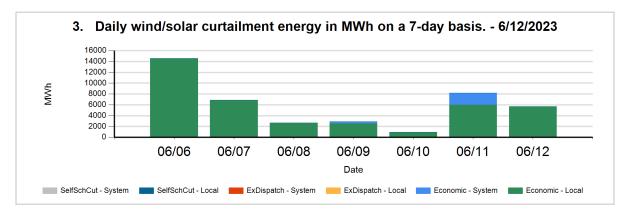
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

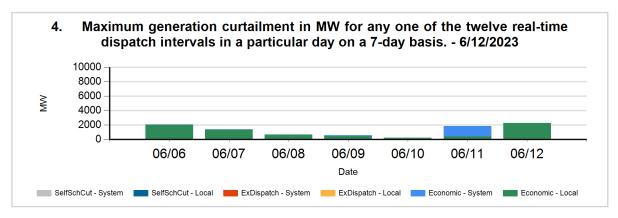


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



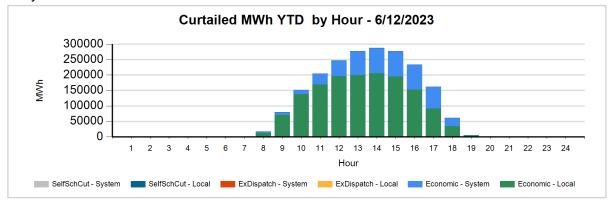




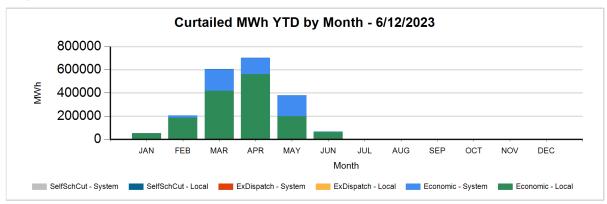




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 6/12/2023
LocalEconomic	1,471,913
LocalSelfSchCut	765
SystemEconomic	538,839
TOTAL	2,011,517



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/12	1	Economic	Local	WIND	8	8
06/12	2	Economic	Local	WIND	8	8
06/12	3	Economic	Local	WIND	7	8
06/12	4	Economic	Local	WIND	8	8
06/12	5	Economic	Local	WIND	8	8
06/12	6	Economic	Local	WIND	7	7
06/12	7	Economic	Local	SOLR	1	9
06/12	7	Economic	Local	WIND	6	6
06/12	8	Economic	Local	SOLR	15	63
06/12	8	Economic	Local	WIND	6	6
06/12	8	Economic	System	SOLR	1	
06/12	9	Economic	Local	SOLR	299	489
06/12	9	Economic	Local	WIND	98	95
06/12	9	Economic	System	SOLR	11	
06/12	10	Economic	Local	SOLR	605	1206
06/12	10	Economic	Local	WIND	57	36
06/12	10	Economic	System	SOLR	8	
06/12	10	Economic	System	WIND	1	
06/12	10	SelfSchCut	Local	SOLR	1	1
06/12	11	Economic	Local	SOLR	528	937
06/12	11	Economic	Local	WIND	50	54
06/12	11	Economic	System	SOLR	1	
06/12	11	SelfSchCut	Local	SOLR	6	4
06/12	12	Economic	Local	SOLR	604	661
06/12	12	Economic	Local	WIND	91	99
06/12	12	SelfSchCut	Local	SOLR	5	11
06/12	13	Economic	Local	SOLR	98	185
06/12	13	Economic	Local	WIND	1	6
06/12	13	Economic	System	SOLR	0	
06/12	13	SelfSchCut	Local	SOLR	2	
06/12	14	Economic	Local	SOLR	120	182



06/12	14	SelfSchCut	Local	SOLR	4	5
06/12	15	Economic	Local	SOLR	133	164
06/12	15	Economic	Local	WIND	1	
06/12	15	SelfSchCut	Local	SOLR	3	11
06/12	16	Economic	Local	SOLR	262	411
06/12	16	Economic	Local	WIND	25	41
06/12	16	Economic	System	SOLR	8	22
06/12	16	SelfSchCut	Local	SOLR	1	
06/12	17	Economic	Local	SOLR	1563	2215
06/12	17	Economic	Local	WIND	55	53
06/12	18	Economic	Local	SOLR	668	1378
06/12	18	Economic	Local	WIND	48	67
06/12	19	Economic	Local	SOLR	129	346
06/12	19	Economic	Local	WIND	59	138
06/12	19	Economic	System	SOLR	25	13
06/12	19	Economic	System	WIND	2	29
06/12	20	Economic	Local	SOLR	1	
06/12	20	Economic	Local	WIND	9	10
06/12	20	Economic	System	SOLR	3	20
06/12	21	Economic	Local	SOLR	0	1
06/12	21	Economic	Local	WIND	8	8
06/12	22	Economic	Local	WIND	8	8
06/12	23	Economic	Local	WIND	8	8
06/12	24	Economic	Local	WIND	8	9

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.

