

## Wind and Solar Curtailment June 11, 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.

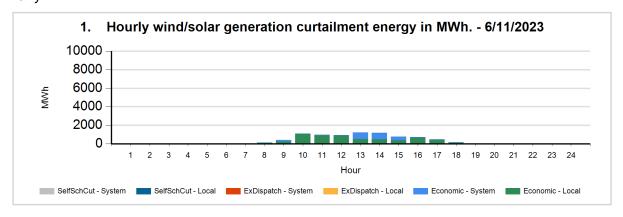
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

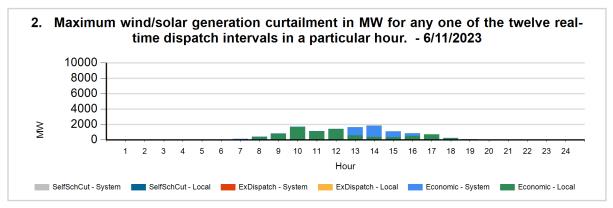
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

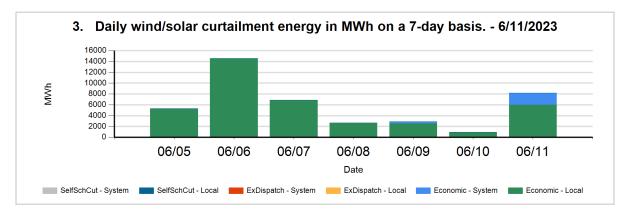
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

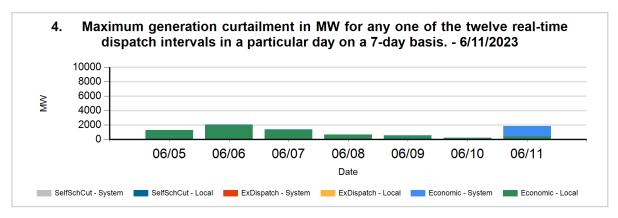


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



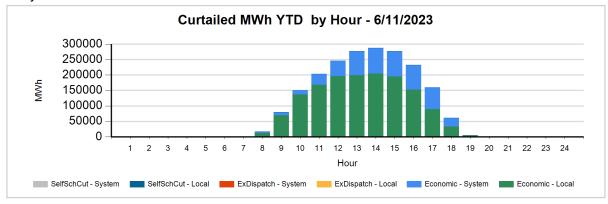




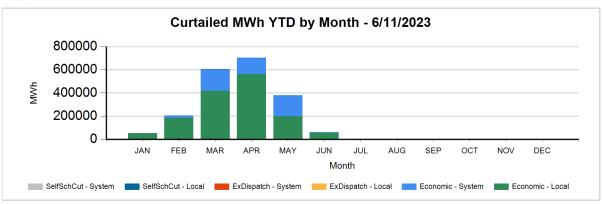




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 6/11/2023
LocalEconomic	1,466,305
LocalSelfSchCut	742
SystemEconomic	538,778
TOTAL	2,005,825



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/11	1	Economic	Local	WIND	5	8
06/11	2	Economic	Local	WIND	8	8
06/11	3	Economic	Local	WIND	8	8
06/11	4	Economic	Local	WIND	8	8
06/11	5	Economic	Local	WIND	8	8
06/11	6	Economic	Local	WIND	8	8
06/11	7	Economic	Local	SOLR	2	
06/11	7	Economic	Local	WIND	7	7
06/11	7	Economic	System	SOLR	28	98
06/11	8	Economic	Local	SOLR	89	360
06/11	8	Economic	Local	WIND	11	36
06/11	8	Economic	System	SOLR	29	17
06/11	8	Economic	System	WIND	5	9
06/11	9	Economic	Local	SOLR	232	764
06/11	9	Economic	Local	WIND	17	38
06/11	9	Economic	System	SOLR	148	36
06/11	9	Economic	System	WIND	12	9
06/11	10	Economic	Local	SOLR	1041	1653
06/11	10	Economic	Local	WIND	52	68
06/11	10	Economic	System	SOLR	1	
06/11	10	Economic	System	WIND	6	5
06/11	10	SelfSchCut	Local	SOLR	0	
06/11	11	Economic	Local	SOLR	869	1034
06/11	11	Economic	Local	WIND	73	73
06/11	11	Economic	System	WIND	6	6
06/11	11	SelfSchCut	Local	SOLR	4	1
06/11	12	Economic	Local	SOLR	812	1296
06/11	12	Economic	Local	WIND	60	72
06/11	12	Economic	System	SOLR	20	
06/11	12	Economic	System	WIND	27	31
06/11	12	SelfSchCut	Local	SOLR	7	3



06/11	13	Economic	Local	SOLR	499	572
06/11	13	Economic	System	SOLR	571	909
06/11	13	Economic	System	WIND	115	113
06/11	13	SelfSchCut	Local	SOLR	15	14
06/11	14	Economic	Local	SOLR	483	377
06/11	14	Economic	Local	WIND	10	
06/11	14	Economic	System	SOLR	586	1328
06/11	14	Economic	System	WIND	83	93
06/11	14	SelfSchCut	Local	SOLR	13	17
06/11	15	Economic	Local	SOLR	356	331
06/11	15	Economic	Local	WIND	12	
06/11	15	Economic	System	SOLR	318	679
06/11	15	Economic	System	WIND	67	81
06/11	15	SelfSchCut	Local	SOLR	5	9
06/11	16	Economic	Local	SOLR	606	498
06/11	16	Economic	Local	WIND	4	
06/11	16	Economic	System	SOLR	71	262
06/11	16	Economic	System	WIND	31	64
06/11	16	SelfSchCut	Local	SOLR	6	11
06/11	17	Economic	Local	SOLR	453	678
06/11	17	Economic	Local	WIND	10	35
06/11	17	Economic	System	SOLR	7	
06/11	17	Economic	System	WIND	12	
06/11	18	Economic	Local	SOLR	151	235
06/11	18	Economic	Local	WIND	8	9
06/11	18	Economic	System	SOLR	1	5
06/11	18	Economic	System	WIND	1	
06/11	19	Economic	Local	SOLR	8	58
06/11	19	Economic	Local	WIND	11	10
06/11	19	Economic	System	SOLR	6	
06/11	19	Economic	System	WIND	2	2
06/11	20	Economic	Local	WIND	11	12
06/11	20	Economic	System	WIND	1	
06/11	21	Economic	Local	WIND	15	9



06/11	21	Economic	System	WIND	6	30
06/11	22	Economic	Local	WIND	10	21
06/11	22	Economic	System	WIND	1	
06/11	23	Economic	Local	WIND	9	9
06/11	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.