

## Wind and Solar Curtailment May 02, 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.

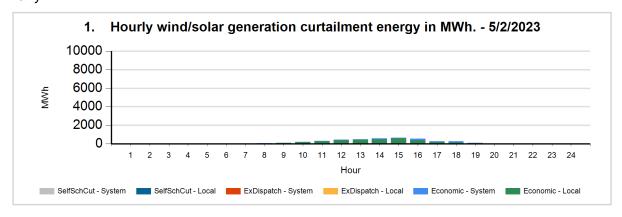
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

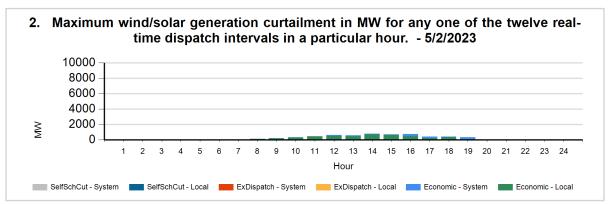
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

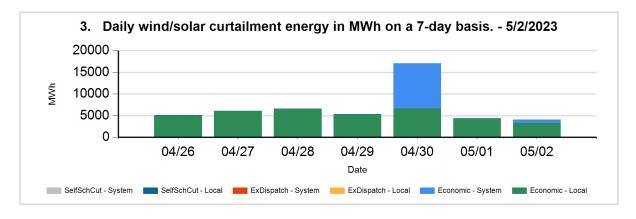
For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables FastFacts.pdf

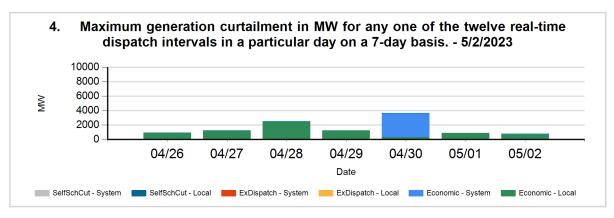


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



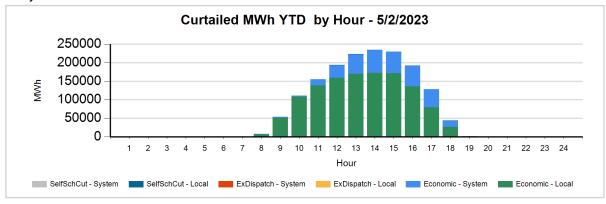




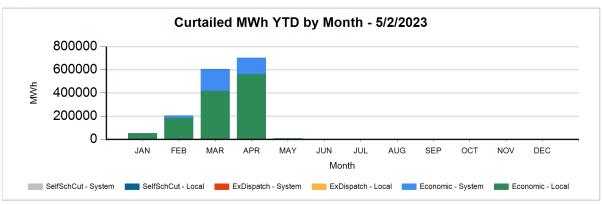




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 5/2/2023			
LocalEconomic	1,220,278			
LocalSelfSchCut	385			
SystemEconomic	353,990			
TOTAL	1,574,654			



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/02	7	Economic	Local	SOLR	4	35
05/02	8	Economic	Local	SOLR	54	101
05/02	8	Economic	System	SOLR	2	
05/02	9	Economic	Local	SOLR	104	220
05/02	9	Economic	System	SOLR	0	
05/02	10	Economic	Local	SOLR	198	333
05/02	10	Economic	System	SOLR	13	14
05/02	11	Economic	Local	SOLR	297	450
05/02	11	Economic	System	SOLR	21	
05/02	12	Economic	Local	SOLR	369	493
05/02	12	Economic	System	SOLR	67	113
05/02	13	Economic	Local	SOLR	440	448
05/02	13	Economic	System	SOLR	30	130
05/02	14	Economic	Local	SOLR	464	593
05/02	14	Economic	Local	WIND	17	108
05/02	14	Economic	System	SOLR	107	86
05/02	14	Economic	System	WIND	9	
05/02	15	Economic	Local	SOLR	537	545
05/02	15	Economic	Local	WIND	55	82
05/02	15	Economic	System	SOLR	53	86
05/02	15	Economic	System	WIND	9	
05/02	16	Economic	Local	SOLR	351	454
05/02	16	Economic	Local	WIND	23	
05/02	16	Economic	System	SOLR	58	116
05/02	16	Economic	System	WIND	103	183
05/02	17	Economic	Local	SOLR	131	191
05/02	17	Economic	Local	WIND	24	
05/02	17	Economic	System	SOLR	60	91
05/02	17	Economic	System	WIND	74	141
05/02	18	Economic	Local	SOLR	99	145
05/02	18	Economic	Local	WIND	48	192



05/02	18	Economic	System	SOLR	46	77
05/02	18	Economic	System	WIND	72	9
05/02	19	Economic	Local	SOLR	50	96
05/02	19	Economic	Local	WIND	2	
05/02	19	Economic	System	SOLR	9	66
05/02	19	Economic	System	WIND	44	172

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.