

## Wind and Solar Curtailment October 23, 2022

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.

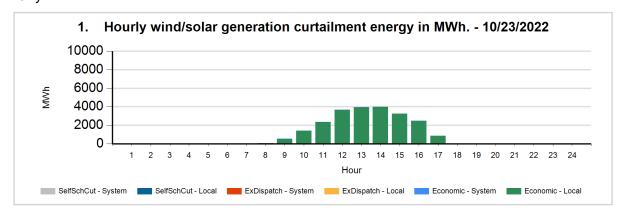
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

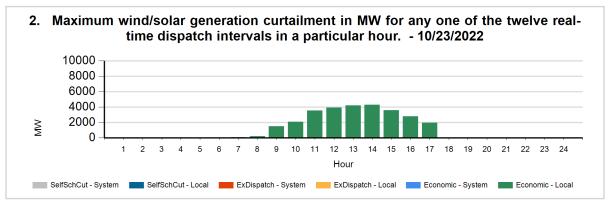
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

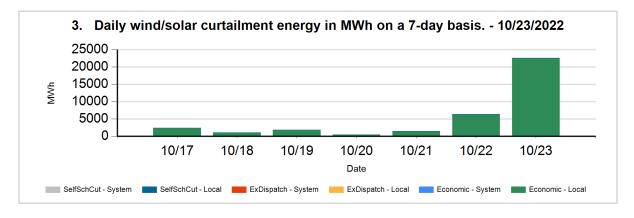
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

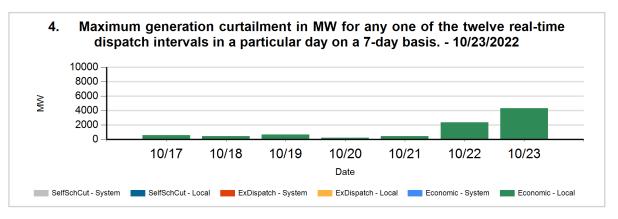


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



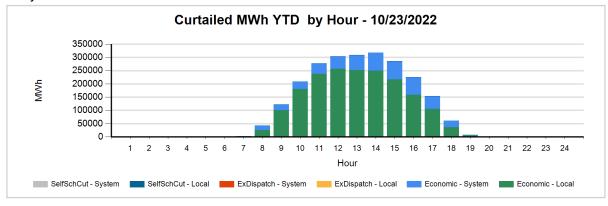




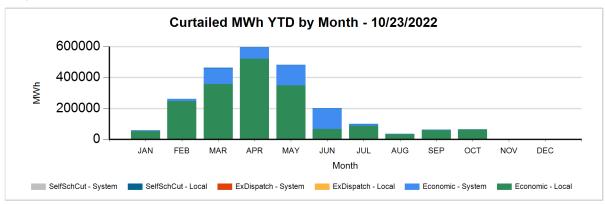




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 10/23/2022
LocalEconomic	1,829,729
LocalSelfSchCut	6,302
SystemEconomic	485,445
TOTAL	2,321,476



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
10/23	7	Economic	Local	WIND	10	63
10/23	8	Economic	Local	SOLR	13	71
10/23	8	Economic	Local	WIND	66	115
10/23	9	Economic	Local	SOLR	411	1272
10/23	9	Economic	Local	WIND	147	220
10/23	9	Economic	System	SOLR	2	
10/23	10	Economic	Local	SOLR	1162	1772
10/23	10	Economic	Local	WIND	241	310
10/23	10	Economic	System	SOLR	0	
10/23	11	Economic	Local	SOLR	2087	3237
10/23	11	Economic	Local	WIND	248	293
10/23	11	SelfSchCut	Local	SOLR	1	
10/23	12	Economic	Local	SOLR	3336	3571
10/23	12	Economic	Local	WIND	329	356
10/23	12	SelfSchCut	Local	SOLR	3	7
10/23	13	Economic	Local	SOLR	3566	3762
10/23	13	Economic	Local	WIND	361	429
10/23	13	SelfSchCut	Local	SOLR	3	
10/23	14	Economic	Local	SOLR	3611	3800
10/23	14	Economic	Local	WIND	356	500
10/23	14	SelfSchCut	Local	SOLR	1	
10/23	15	Economic	Local	SOLR	2879	3195
10/23	15	Economic	Local	WIND	358	373
10/23	15	SelfSchCut	Local	SOLR	0	
10/23	16	Economic	Local	SOLR	2232	2510
10/23	16	Economic	Local	WIND	239	277
10/23	16	Economic	System	WIND	4	
10/23	16	SelfSchCut	Local	SOLR	0	
10/23	17	Economic	Local	SOLR	698	1731
10/23	17	Economic	Local	WIND	173	216
10/23	17	Economic	System	WIND	0	



10/23	18	Economic	Local	SOLR	3	18
10/23	18	Economic	Local	WIND	3	
10/23	18	Economic	System	WIND	0	4
10/23	21	Economic	Local	WIND	2	6
10/23	22	Economic	Local	WIND	3	9
10/23	22	Economic	System	WIND	0	
10/23	23	Economic	Local	WIND	3	11
10/23	24	Economic	Local	WIND	4	11

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.