

Wind and Solar Curtailment January 29, 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:

- Economic Local: Market dispatch of generators with economic bids to mitigate local congestion³.
- 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.

¹Only 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.

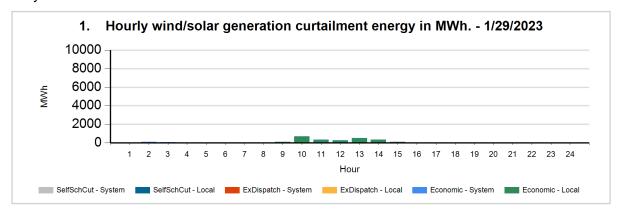
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

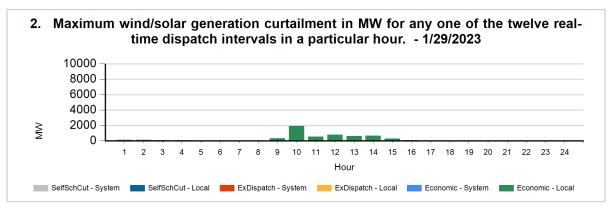
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

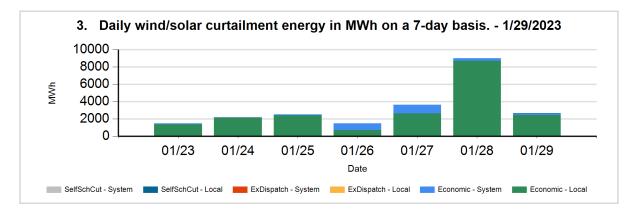
For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables FastFacts.pdf

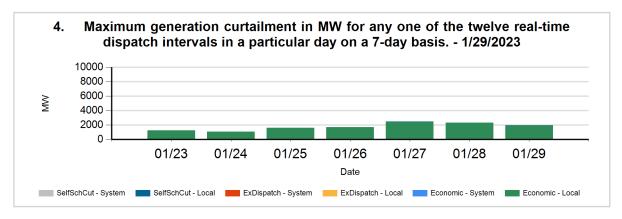


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



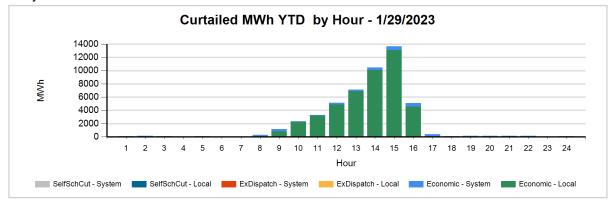




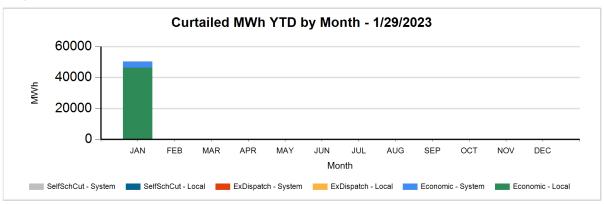




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 1/29/2023
LocalEconomic	46,329
LocalSelfSchCut	4
SystemEconomic	3,807
TOTAL	50,139



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
01/29	1	Economic	Local	WIND	47	100
01/29	2	Economic	Local	WIND	43	107
01/29	2	Economic	System	WIND	59	
01/29	3	Economic	Local	WIND	7	
01/29	3	Economic	System	WIND	55	94
01/29	4	Economic	Local	WIND	9	
01/29	4	Economic	System	WIND	31	73
01/29	5	Economic	Local	WIND	11	
01/29	5	Economic	System	WIND	28	49
01/29	6	Economic	Local	WIND	15	34
01/29	6	Economic	System	WIND	3	
01/29	8	Economic	Local	SOLR	4	
01/29	8	Economic	System	SOLR	14	37
01/29	8	Economic	System	WIND	8	16
01/29	9	Economic	Local	SOLR	70	308
01/29	9	Economic	Local	WIND	14	5
01/29	10	Economic	Local	SOLR	630	1684
01/29	10	Economic	Local	WIND	50	216
01/29	10	SelfSchCut	Local	SOLR	4	35
01/29	11	Economic	Local	SOLR	300	520
01/29	11	Economic	Local	WIND	22	21
01/29	11	Economic	System	SOLR	6	
01/29	12	Economic	Local	SOLR	191	681
01/29	12	Economic	Local	WIND	63	97
01/29	12	Economic	System	SOLR	4	
01/29	13	Economic	Local	SOLR	411	531
01/29	13	Economic	Local	WIND	93	96
01/29	13	Economic	System	SOLR	1	
01/29	14	Economic	Local	SOLR	269	561
01/29	14	Economic	Local	WIND	76	87
01/29	15	Economic	Local	SOLR	43	231



01/29	15	Economic	Local	WIND	62	52
01/29	16	Economic	Local	WIND	16	66
01/29	16	Economic	System	SOLR	1	
01/29	16	Economic	System	WIND	8	
01/29	17	Economic	Local	SOLR	0	
01/29	17	Economic	System	SOLR	7	27
01/29	17	Economic	System	WIND	1	

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.