

Wind and Solar Curtailment January 27, 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 congestion³.
- Economic System: Market dispatch of generators with economic bids to mitigate systemwide 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.

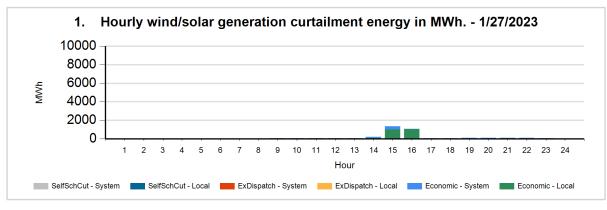
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

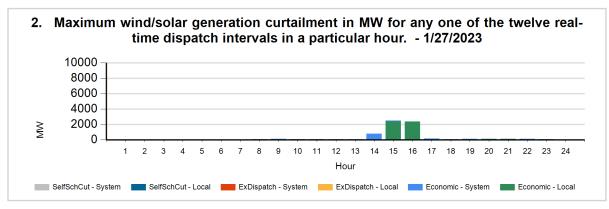
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

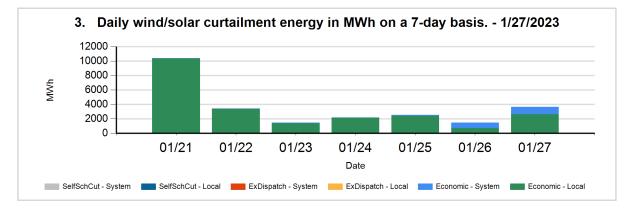
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

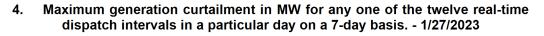


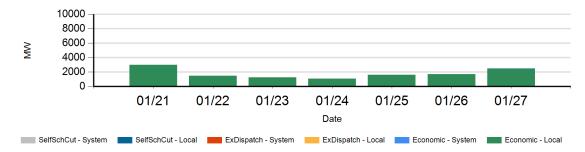
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





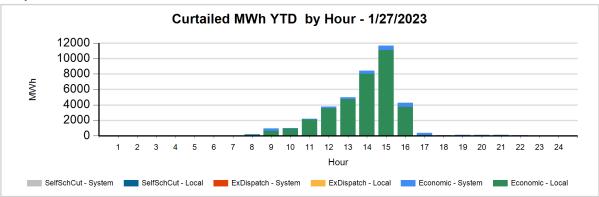




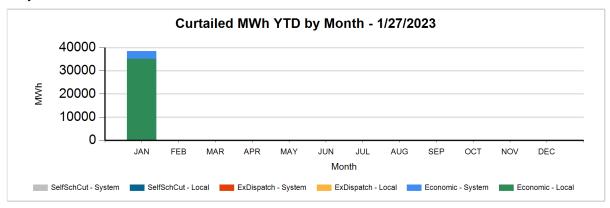




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 1/27/2023
LocalEconomic	35,197
LocalSelfSchCut	0
SystemEconomic	3,259
TOTAL	38,457



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
01/27	5	Economic	Local	WIND	0	
01/27	5	Economic	System	WIND	2	8
01/27	6	Economic	System	WIND	4	9
01/27	8	Economic	Local	SOLR	19	53
01/27	8	Economic	Local	WIND	2	6
01/27	8	Economic	System	SOLR	9	
01/27	8	Economic	System	WIND	1	
01/27	9	Economic	Local	SOLR	28	
01/27	9	Economic	Local	WIND	6	
01/27	9	Economic	System	SOLR	33	89
01/27	9	Economic	System	WIND	7	19
01/27	10	Economic	Local	SOLR	41	48
01/27	10	Economic	Local	WIND	6	22
01/27	10	Economic	System	SOLR	1	
01/27	10	Economic	System	WIND	7	
01/27	11	Economic	Local	SOLR	47	51
01/27	11	Economic	Local	WIND	3	8
01/27	11	Economic	System	SOLR	0	
01/27	11	Economic	System	WIND	3	
01/27	12	Economic	Local	SOLR	47	48
01/27	12	Economic	Local	WIND	3	
01/27	12	Economic	System	SOLR	0	
01/27	12	Economic	System	WIND	6	11
01/27	13	Economic	Local	SOLR	49	54
01/27	13	Economic	Local	WIND	6	
01/27	13	Economic	System	WIND	5	14
01/27	14	Economic	Local	SOLR	74	46
01/27	14	Economic	Local	WIND	8	
01/27	14	Economic	System	SOLR	127	705
01/27	14	Economic	System	WIND	7	24
01/27	15	Economic	Local	SOLR	963	2335



80	35	WIND	Local	Economic	15	01/27
85	306	SOLR	System	Economic	15	01/27
	27	WIND	System	Economic	15	01/27
2299	986	SOLR	Local	Economic	16	01/27
79	70	WIND	Local	Economic	16	01/27
	28	SOLR	System	Economic	16	01/27
	6	SOLR	Local	Economic	17	01/27
	22	WIND	Local	Economic	17	01/27
80	21	SOLR	System	Economic	17	01/27
63	32	WIND	System	Economic	17	01/27
	46	WIND	Local	Economic	18	01/27
90	23	WIND	System	Economic	18	01/27
	28	WIND	Local	Economic	19	01/27
114	82	WIND	System	Economic	19	01/27
117	19	WIND	Local	Economic	20	01/27
	93	WIND	System	Economic	20	01/27
127	77	WIND	Local	Economic	21	01/27
	38	WIND	System	Economic	21	01/27
	30	WIND	Local	Economic	22	01/27
111	58	WIND	System	Economic	22	01/27
72	12	WIND	Local	Economic	23	01/27
	43	WIND	System	Economic	23	01/27
	13	WIND	Local	Economic	24	01/27
51	24	WIND	System	Economic	24	01/27

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.

