

Wind and Solar Curtailment January 26, 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.

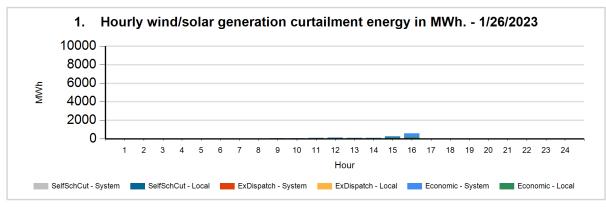
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

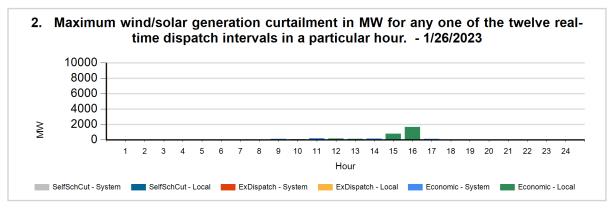
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

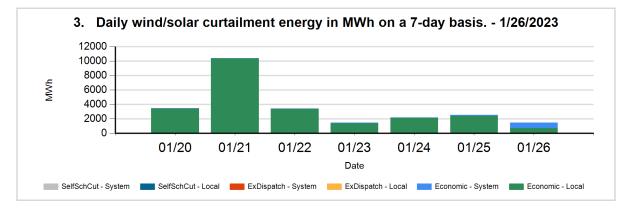
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

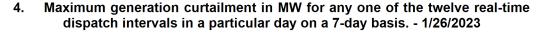


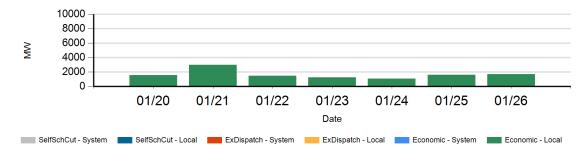
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





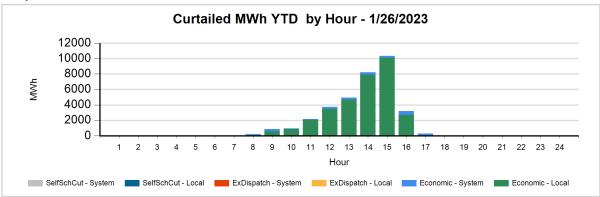




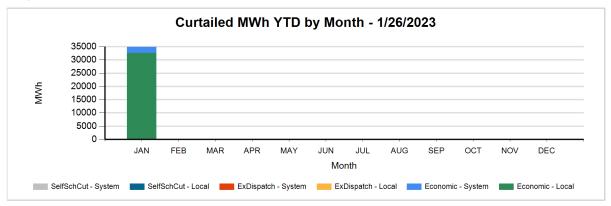




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 1/26/2023
LocalEconomic	32,552
LocalSelfSchCut	0
SystemEconomic	2,271
TOTAL	34,824



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
)1/26	8	Economic	Local	SOLR	10	57
)1/26	8	Economic	System	SOLR	16	
)1/26	9	Economic	Local	SOLR	22	
)1/26	9	Economic	Local	WIND	4	
)1/26	9	Economic	System	SOLR	42	87
)1/26	9	Economic	System	WIND	10	32
)1/26	10	Economic	Local	SOLR	43	53
)1/26	10	Economic	Local	WIND	6	28
)1/26	10	Economic	System	SOLR	3	
)1/26	10	Economic	System	WIND	5	
)1/26	11	Economic	Local	SOLR	57	48
)1/26	11	Economic	Local	WIND	12	
)1/26	11	Economic	System	SOLR	20	123
)1/26	11	Economic	System	WIND	23	41
)1/26	12	Economic	Local	SOLR	60	126
)1/26	12	Economic	Local	WIND	22	43
)1/26	12	Economic	System	SOLR	10	
)1/26	12	Economic	System	WIND	26	
)1/26	13	Economic	Local	SOLR	49	66
)1/26	13	Economic	Local	WIND	18	62
)1/26	13	Economic	System	SOLR	3	
)1/26	13	Economic	System	WIND	28	
)1/26	14	Economic	Local	SOLR	58	50
)1/26	14	Economic	Local	WIND	17	
)1/26	14	Economic	System	SOLR	17	94
)1/26	14	Economic	System	WIND	23	15
)1/26	15	Economic	Local	SOLR	149	746
)1/26	15	Economic	Local	WIND	15	40
)1/26	15	Economic	System	SOLR	71	
)1/26	15	Economic	System	WIND	23	
)1/26	16	Economic	Local	SOLR	156	1627



01/26	16	Economic	Local	WIND	5	42
01/26	16	Economic	System	SOLR	397	
01/26	16	Economic	System	WIND	36	
01/26	17	Economic	System	SOLR	28	86
01/26	17	Economic	System	WIND	7	19

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.