

## Wind and Solar Curtailment January 10, 2025

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why<sup>1</sup>. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation<sup>2</sup>.

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>.
- Economic System: Market dispatch of generators with economic bids to mitigate systemwide oversupply<sup>4</sup>.
- 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.

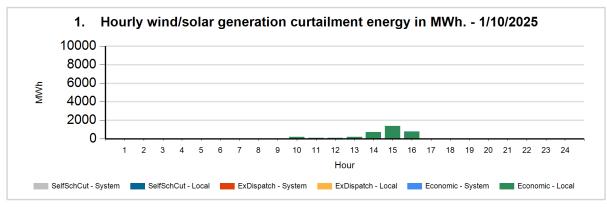
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

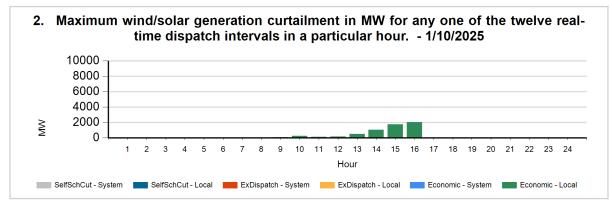
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

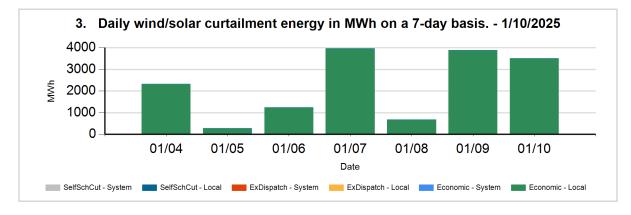
<sup>4</sup>For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\_FastFacts.pdf</u>



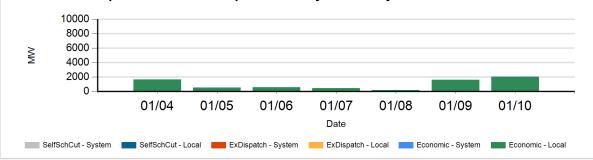
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





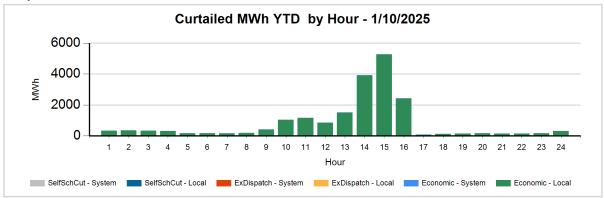


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 1/10/2025

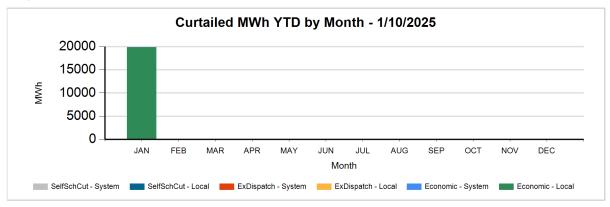




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 1/10/2025
LocalEconomic	19,806
LocalSelfSchCut	1
SystemEconomic	58
TOTAL	19,864



HOU CUF R	RT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
8 Ecc	onomic	Local	WIND	4	50
9 Ecc	onomic	Local	SOLR	8	64
10 Ecc	onomic	Local	SOLR	185	265
10 Eco	onomic	Local	WIND	2	
11 Eco	onomic	Local	SOLR	90	111
12 Eco	onomic	Local	SOLR	93	141
13 Ecc	onomic	Local	SOLR	213	504
14 Ecc	onomic	Local	SOLR	735	1049
14 Eco	onomic	System	WIND	0	
15 Ecc	onomic	Local	SOLR	1369	1747
15 Ecc	onomic	Local	WIND	14	10
15 Ecc	onomic	System	WIND	0	
16 Ecc	onomic	Local	SOLR	756	1940
16 Ecc	onomic	Local	WIND	35	92
16 Ecc	onomic	System	SOLR	3	13
16 Ecc	onomic	System	WIND	1	4
17 Eco	onomic	System	SOLR	1	9

## Data used to produce hourly chart

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.