

Wind and Solar Curtailment November 16, 2024

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.

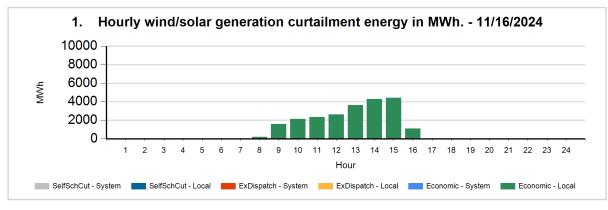
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

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.

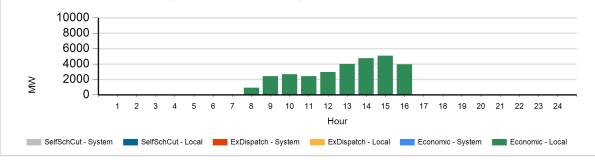
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

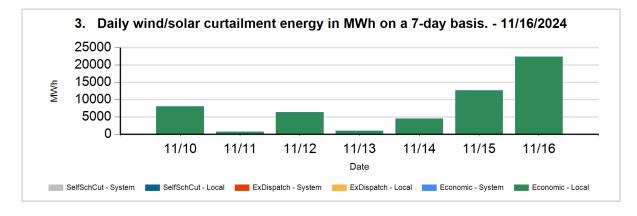


The following charts show the daily and 7-day wind and solar curtailment by category, if any.

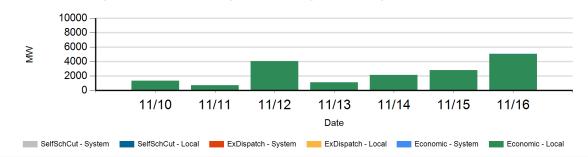


2. Maximum wind/solar generation curtailment in MW for any one of the twelve realtime dispatch intervals in a particular hour. - 11/16/2024



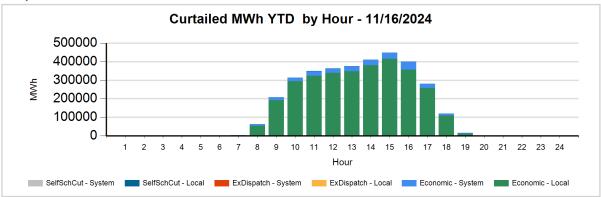


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 11/16/2024

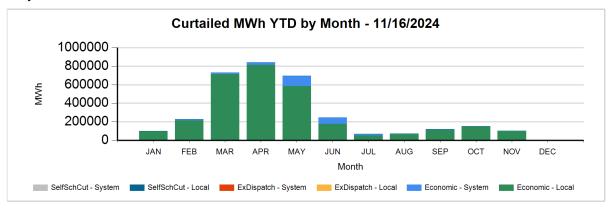




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 11/16/2024
LocalEconomic	3,084,616
LocalSelfSchCut	2,387
SystemEconomic	269,680
TOTAL	3,356,683



DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
11/16	7	Economic	Local	SOLR	0	1
11/16	8	Economic	Local	SOLR	195	899
11/16	9	Economic	Local	SOLR	1533	2343
11/16	9	Economic	Local	WIND	42	69
11/16	10	Economic	Local	SOLR	2089	2608
11/16	10	Economic	Local	WIND	63	74
11/16	11	Economic	Local	SOLR	2292	2354
11/16	11	Economic	Local	WIND	64	80
11/16	12	Economic	Local	SOLR	2558	2903
11/16	12	Economic	Local	WIND	60	60
11/16	13	Economic	Local	SOLR	3507	3910
11/16	13	Economic	Local	WIND	114	108
11/16	14	Economic	Local	SOLR	4124	4556
11/16	14	Economic	Local	WIND	177	215
11/16	15	Economic	Local	SOLR	4180	4788
11/16	15	Economic	Local	WIND	258	274
11/16	15	Economic	System	SOLR	4	5
11/16	16	Economic	Local	SOLR	1058	3747
11/16	16	Economic	Local	WIND	59	198
11/16	17	Economic	Local	SOLR	0	6

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.