

Wind and Solar Curtailment April 27, 2025

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 oversupply⁴.
- 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.

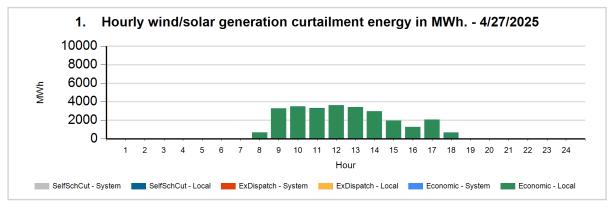
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

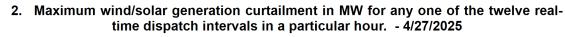
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

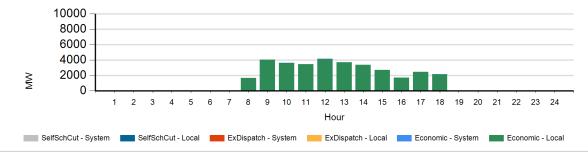
⁴For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

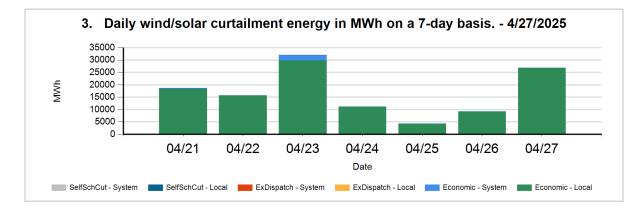


The following charts show the daily and 7-day wind and solar curtailment by category, if any.

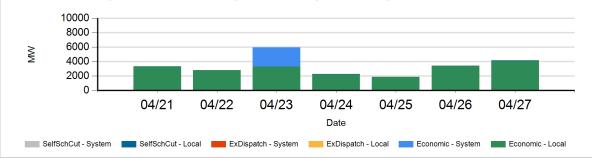






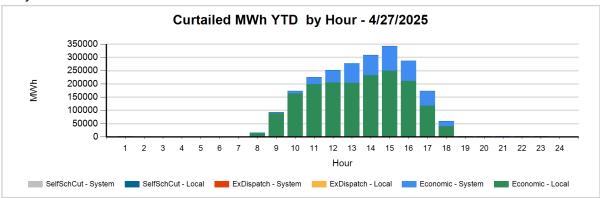


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/27/2025

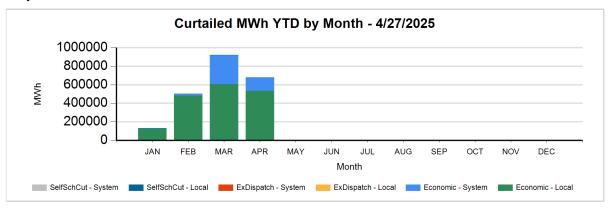




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/27/2025
LocalEconomic	1,743,468
LocalSelfSchCut	423
SystemEconomic	484,448
TOTAL	2,228,339



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/27	8	Economic	Local	SOLR	607	1431
04/27	8	Economic	Local	WIND	91	229
04/27	9	Economic	Local	SOLR	2671	3370
04/27	9	Economic	Local	WIND	626	656
04/27	10	Economic	Local	SOLR	2871	3010
04/27	10	Economic	Local	WIND	614	605
04/27	10	Economic	System	SOLR	2	
04/27	10	SelfSchCut	Local	SOLR	1	5
04/27	11	Economic	Local	SOLR	2713	2884
04/27	11	Economic	Local	WIND	616	579
04/27	11	SelfSchCut	Local	SOLR	3	
04/27	12	Economic	Local	SOLR	3096	3604
04/27	12	Economic	Local	WIND	508	571
04/27	12	Economic	System	SOLR	14	11
04/27	12	SelfSchCut	Local	SOLR	0	
04/27	13	Economic	Local	SOLR	3030	3254
04/27	13	Economic	Local	WIND	407	448
04/27	14	Economic	Local	SOLR	2657	2980
04/27	14	Economic	Local	WIND	310	416
04/27	15	Economic	Local	SOLR	1735	2475
04/27	15	Economic	Local	WIND	226	247
04/27	16	Economic	Local	SOLR	1143	1556
04/27	16	Economic	Local	WIND	143	156
04/27	17	Economic	Local	SOLR	1895	2272
04/27	17	Economic	Local	WIND	172	188
04/27	18	Economic	Local	SOLR	545	1744
04/27	18	Economic	Local	WIND	140	415
04/27	18	Economic	System	SOLR	1	17

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.

