

Wind and Solar Curtailment April 23, 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.

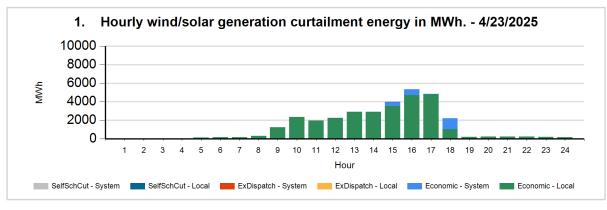
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

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.

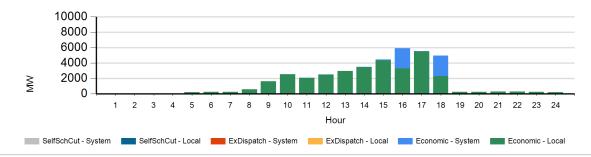
⁴For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

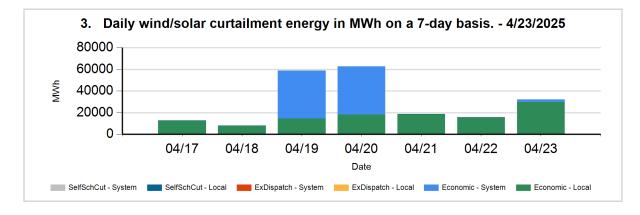


The following charts show the daily and 7-day wind and solar curtailment by category, if any.

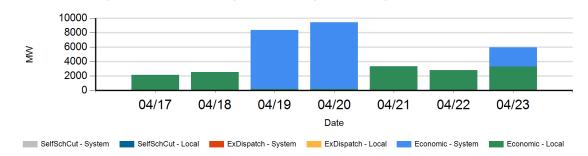


2. Maximum wind/solar generation curtailment in MW for any one of the twelve realtime dispatch intervals in a particular hour. - 4/23/2025



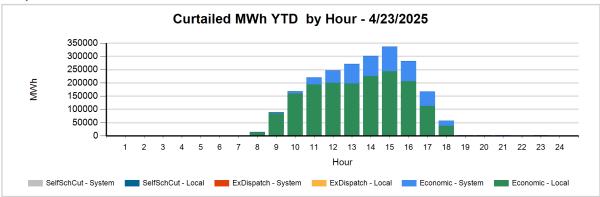


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/23/2025

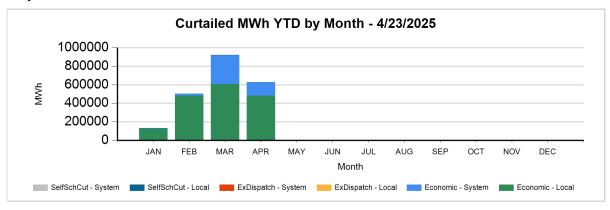




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/23/2025
LocalEconomic	1,692,089
LocalSelfSchCut	403
SystemEconomic	484,401
TOTAL	2,176,893



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/23	4	Economic	Local	WIND	6	43
04/23	5	Economic	Local	WIND	147	189
04/23	6	Economic	Local	WIND	158	237
04/23	7	Economic	Local	WIND	186	227
04/23	8	Economic	Local	SOLR	116	408
04/23	8	Economic	Local	WIND	196	172
04/23	9	Economic	Local	SOLR	1130	1520
04/23	9	Economic	Local	WIND	123	107
04/23	10	Economic	Local	SOLR	2106	2344
04/23	10	Economic	Local	WIND	229	179
04/23	11	Economic	Local	SOLR	1871	2014
04/23	11	Economic	Local	WIND	104	78
04/23	12	Economic	Local	SOLR	2120	2338
04/23	12	Economic	Local	WIND	110	160
04/23	12	Economic	System	WIND	6	
04/23	12	SelfSchCut	Local	SOLR	2	5
04/23	13	Economic	Local	SOLR	2688	2641
04/23	13	Economic	Local	WIND	217	334
04/23	13	Economic	System	WIND	3	
04/23	13	SelfSchCut	Local	SOLR	2	
04/23	14	Economic	Local	SOLR	2678	3301
04/23	14	Economic	Local	WIND	188	182
04/23	14	Economic	System	WIND	29	39
04/23	14	SelfSchCut	Local	SOLR	2	
04/23	15	Economic	Local	SOLR	3296	4118
04/23	15	Economic	Local	WIND	237	222
04/23	15	Economic	System	SOLR	371	39
04/23	15	Economic	System	WIND	71	97
04/23	15	SelfSchCut	Local	SOLR	2	
04/23	16	Economic	Local	SOLR	4164	3004
04/23	16	Economic	Local	WIND	547	275



04/23	16	Economic	System	SOLR	467	2098
04/23	16	Economic	System	WIND	136	559
04/23	16	SelfSchCut	Local	SOLR	1	
04/23	17	Economic	Local	SOLR	3954	4662
04/23	17	Economic	Local	WIND	845	828
04/23	17	Economic	System	SOLR	0	
04/23	17	Economic	System	WIND	31	77
04/23	18	Economic	Local	SOLR	866	1962
04/23	18	Economic	Local	WIND	177	341
04/23	18	Economic	System	SOLR	916	2109
04/23	18	Economic	System	WIND	255	542
04/23	19	Economic	Local	WIND	203	246
04/23	20	Economic	Local	WIND	237	257
04/23	21	Economic	Local	WIND	246	282
04/23	22	Economic	Local	WIND	228	277
04/23	23	Economic	Local	WIND	216	237
04/23	24	Economic	Local	WIND	172	205

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.