

Wind and Solar Curtailment May 07, 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.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide 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.

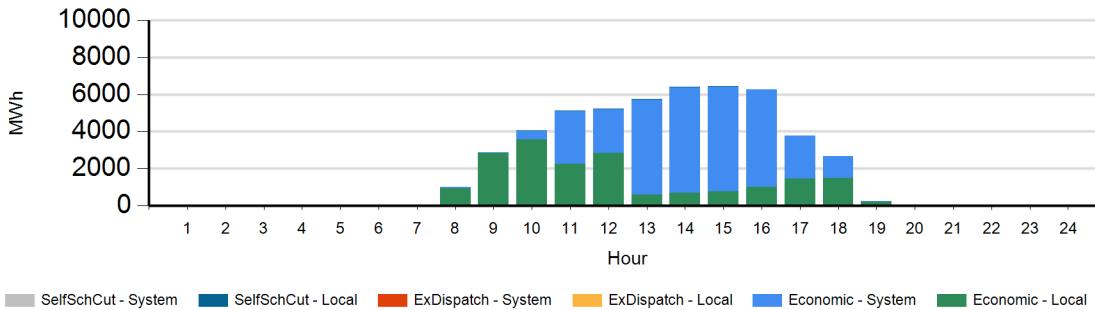
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

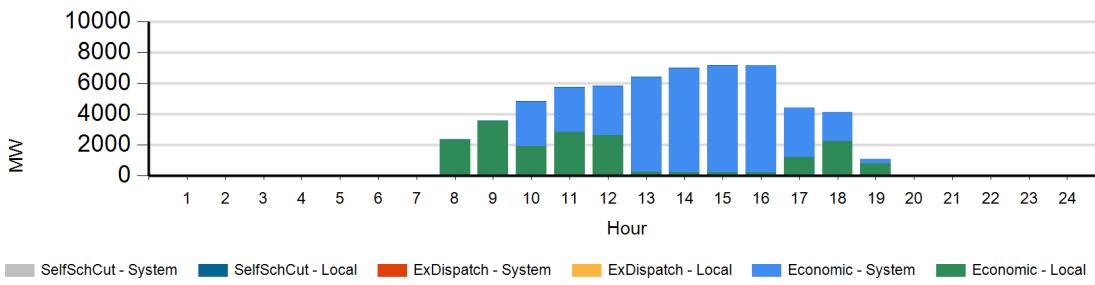
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

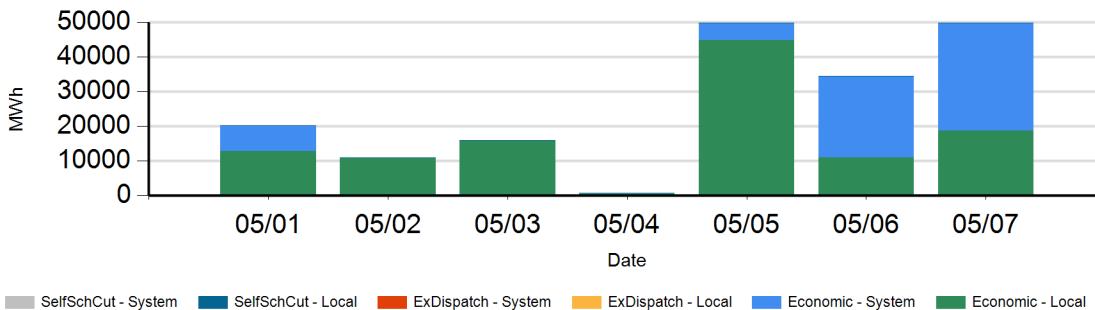
1. Hourly wind/solar generation curtailment energy in MWh. - 5/7/2024



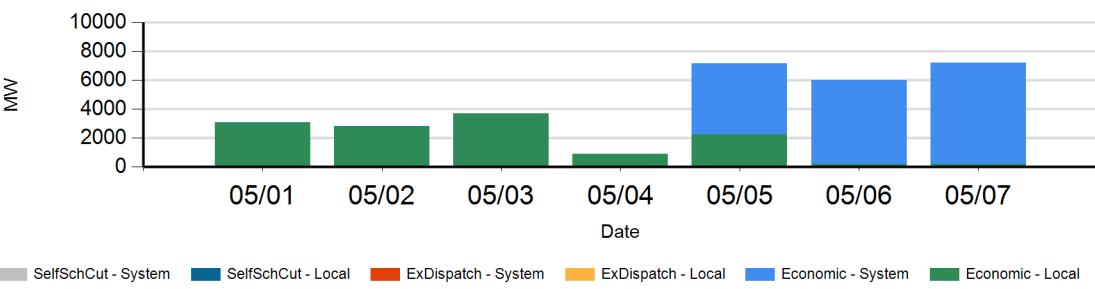
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 5/7/2024



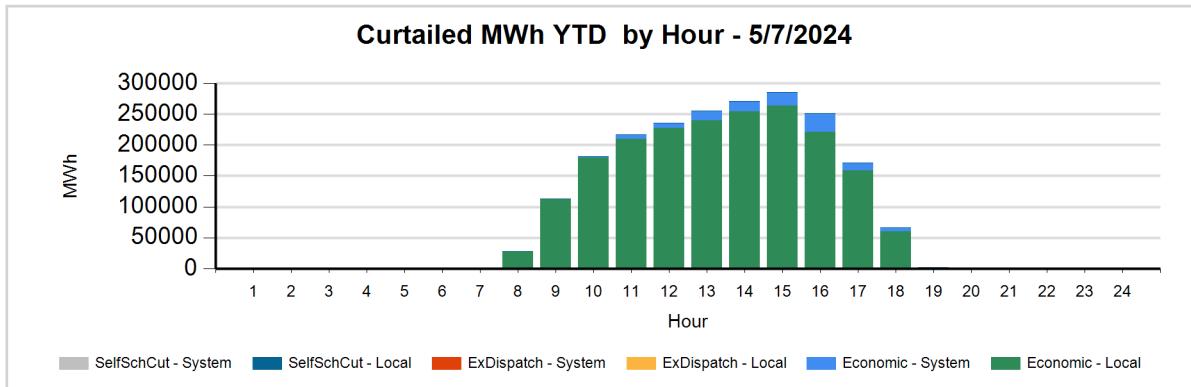
3. Daily wind/solar generation curtailment energy in MWh on a 7-day basis. - 5/7/2024



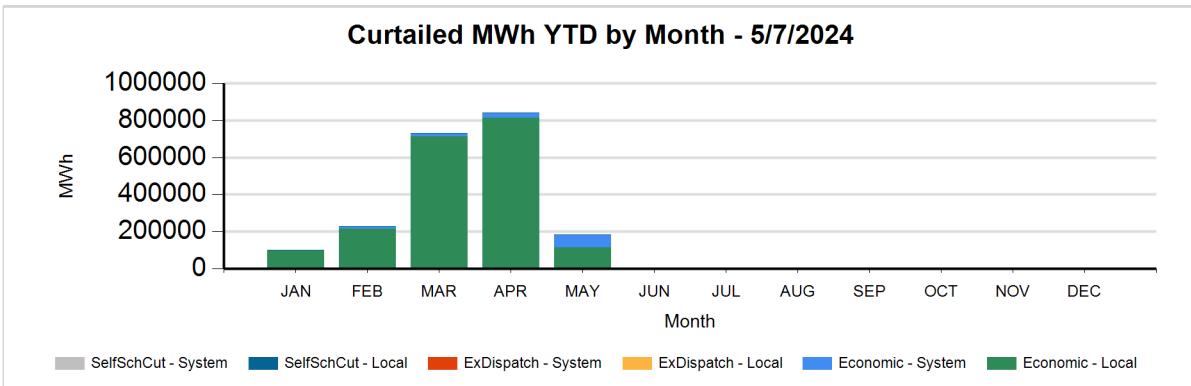
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 5/7/2024



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 - 5/7/2024
LocalEconomic	1,957,307
LocalSelfSchCut	1,308
SystemEconomic	122,835
TOTAL	2,081,450

Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/07	7	Economic	Local	SOLR	1	5
05/07	8	Economic	Local	SOLR	834	2139
05/07	8	Economic	Local	WIND	89	219
05/07	8	Economic	System	SOLR	66	
05/07	8	Economic	System	WIND	18	22
05/07	9	Economic	Local	SOLR	2672	3337
05/07	9	Economic	Local	WIND	187	227
05/07	9	Economic	System	WIND	7	10
05/07	10	Economic	Local	SOLR	3310	1687
05/07	10	Economic	Local	WIND	255	242
05/07	10	Economic	System	SOLR	440	2672
05/07	10	Economic	System	WIND	45	224
05/07	10	SelfSchCut	Local	SOLR	4	6
05/07	11	Economic	Local	SOLR	1983	2573
05/07	11	Economic	Local	WIND	254	278
05/07	11	Economic	System	SOLR	2588	2596
05/07	11	Economic	System	WIND	295	308
05/07	11	SelfSchCut	Local	SOLR	7	15
05/07	12	Economic	Local	SOLR	2498	2351
05/07	12	Economic	Local	WIND	323	282
05/07	12	Economic	System	SOLR	2022	2809
05/07	12	Economic	System	WIND	364	389
05/07	12	SelfSchCut	Local	SOLR	6	15
05/07	13	Economic	Local	SOLR	550	225
05/07	13	Economic	Local	WIND	47	
05/07	13	Economic	System	SOLR	4406	5304
05/07	13	Economic	System	WIND	729	875
05/07	13	SelfSchCut	Local	SOLR	5	4
05/07	14	Economic	Local	SOLR	640	219
05/07	14	Economic	Local	WIND	65	
05/07	14	Economic	System	SOLR	4912	5776

05/07	14	Economic	System	WIND	784	1006
05/07	14	SelfSchCut	Local	SOLR	2	2
05/07	15	Economic	Local	SOLR	686	214
05/07	15	Economic	Local	WIND	73	
05/07	15	Economic	System	SOLR	4887	6007
05/07	15	Economic	System	WIND	770	943
05/07	15	SelfSchCut	Local	SOLR	4	4
05/07	16	Economic	Local	SOLR	957	188
05/07	16	Economic	Local	WIND	47	
05/07	16	Economic	System	SOLR	4515	6091
05/07	16	Economic	System	WIND	755	911
05/07	16	SelfSchCut	Local	SOLR	0	
05/07	17	Economic	Local	SOLR	1392	1175
05/07	17	Economic	Local	WIND	75	34
05/07	17	Economic	System	SOLR	2017	2682
05/07	17	Economic	System	WIND	278	537
05/07	18	Economic	Local	SOLR	1275	1994
05/07	18	Economic	Local	WIND	218	249
05/07	18	Economic	System	SOLR	1030	1668
05/07	18	Economic	System	WIND	127	221
05/07	19	Economic	Local	SOLR	159	573
05/07	19	Economic	Local	WIND	36	226
05/07	19	Economic	System	SOLR	31	187
05/07	19	Economic	System	WIND	14	80
05/07	20	Economic	Local	WIND	0	
05/07	20	Economic	System	SOLR	2	14

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.



California ISO