

Wind and Solar Curtailment May 25, 2023

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.

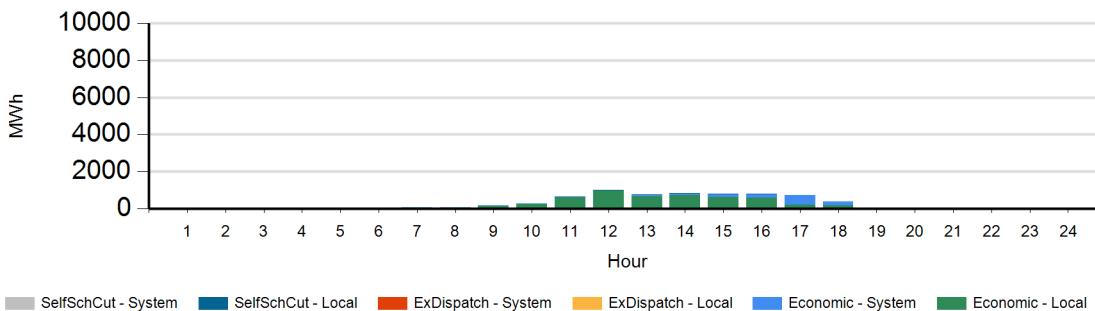
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

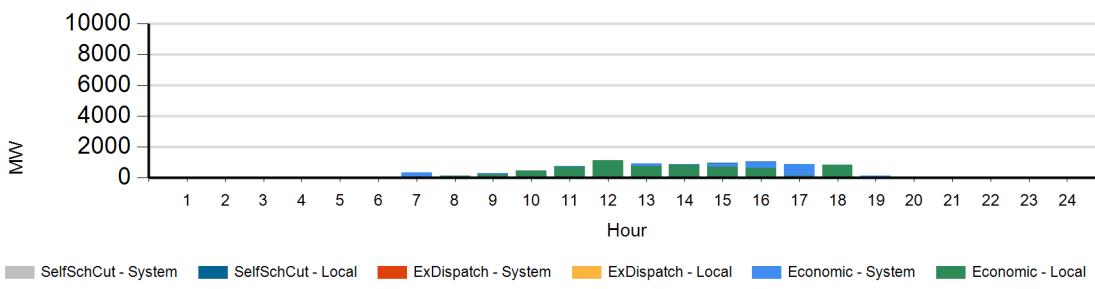
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

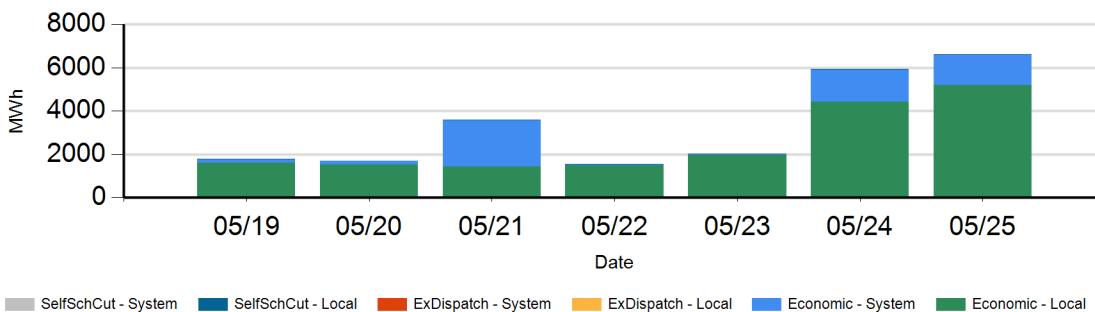
1. Hourly wind/solar generation curtailment energy in MWh. - 5/25/2023



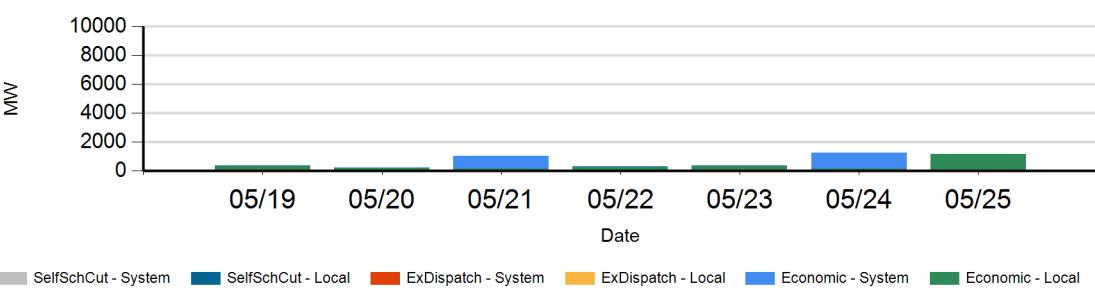
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 5/25/2023



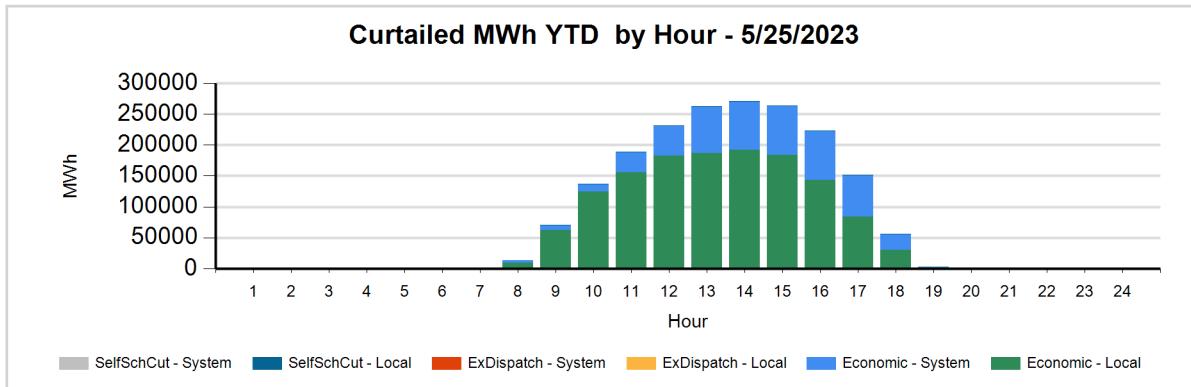
3. Daily wind/solar generation curtailment energy in MWh on a 7-day basis. - 5/25/2023



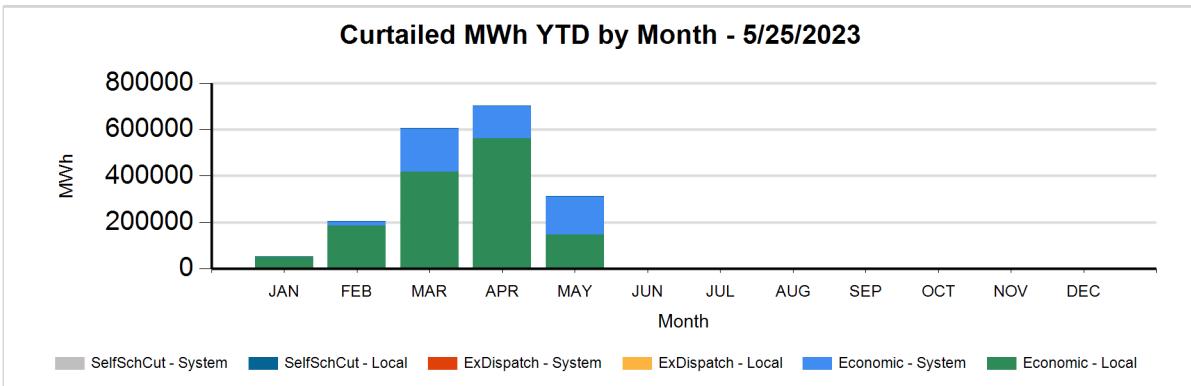
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 5/25/2023



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 - 5/25/2023
LocalEconomic	1,359,889
LocalSelfSchCut	519
SystemEconomic	517,468
TOTAL	1,877,875

Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/25	1	Economic	Local	WIND	12	12
05/25	2	Economic	Local	WIND	13	13
05/25	3	Economic	Local	WIND	12	13
05/25	4	Economic	Local	WIND	12	12
05/25	5	Economic	Local	WIND	12	14
05/25	6	Economic	Local	WIND	12	12
05/25	7	Economic	Local	SOLR	6	5
05/25	7	Economic	Local	WIND	14	12
05/25	7	Economic	System	SOLR	32	303
05/25	7	Economic	System	WIND	3	6
05/25	8	Economic	Local	SOLR	32	79
05/25	8	Economic	Local	WIND	16	41
05/25	8	Economic	System	SOLR	2	
05/25	9	Economic	Local	SOLR	123	176
05/25	9	Economic	Local	WIND	16	14
05/25	9	Economic	System	SOLR	26	95
05/25	10	Economic	Local	SOLR	262	386
05/25	10	Economic	Local	WIND	21	57
05/25	10	Economic	System	SOLR	1	
05/25	10	SelfSchCut	Local	SOLR	0	
05/25	11	Economic	Local	SOLR	550	670
05/25	11	Economic	Local	WIND	62	63
05/25	11	Economic	System	SOLR	27	5
05/25	12	Economic	Local	SOLR	925	1055
05/25	12	Economic	Local	WIND	43	78
05/25	12	Economic	System	SOLR	24	
05/25	12	Economic	System	WIND	9	
05/25	12	SelfSchCut	Local	SOLR	1	
05/25	13	Economic	Local	SOLR	654	743
05/25	13	Economic	Local	WIND	14	14
05/25	13	Economic	System	SOLR	65	171



05/25	13	Economic	System	WIND	9	3
05/25	13	SelfSchCut	Local	SOLR	1	
05/25	14	Economic	Local	SOLR	725	817
05/25	14	Economic	Local	WIND	13	14
05/25	14	Economic	System	SOLR	40	11
05/25	14	Economic	System	WIND	34	34
05/25	14	SelfSchCut	Local	SOLR	2	
05/25	15	Economic	Local	SOLR	606	703
05/25	15	Economic	Local	WIND	15	15
05/25	15	Economic	System	SOLR	80	150
05/25	15	Economic	System	WIND	82	89
05/25	15	SelfSchCut	Local	SOLR	1	1
05/25	16	Economic	Local	SOLR	554	588
05/25	16	Economic	Local	WIND	15	15
05/25	16	Economic	System	SOLR	145	326
05/25	16	Economic	System	WIND	90	90
05/25	16	SelfSchCut	Local	SOLR	1	4
05/25	17	Economic	Local	SOLR	179	90
05/25	17	Economic	Local	WIND	24	16
05/25	17	Economic	System	SOLR	434	672
05/25	17	Economic	System	WIND	82	105
05/25	18	Economic	Local	SOLR	130	721
05/25	18	Economic	Local	WIND	24	106
05/25	18	Economic	System	SOLR	182	
05/25	18	Economic	System	WIND	40	
05/25	19	Economic	Local	SOLR	14	32
05/25	19	Economic	Local	WIND	17	18
05/25	19	Economic	System	SOLR	9	75
05/25	20	Economic	Local	WIND	15	16
05/25	21	Economic	Local	WIND	13	13
05/25	22	Economic	Local	WIND	13	13
05/25	23	Economic	Local	WIND	13	13
05/25	24	Economic	Local	WIND	12	13



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.