

Wind and Solar Curtailment June 09, 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.

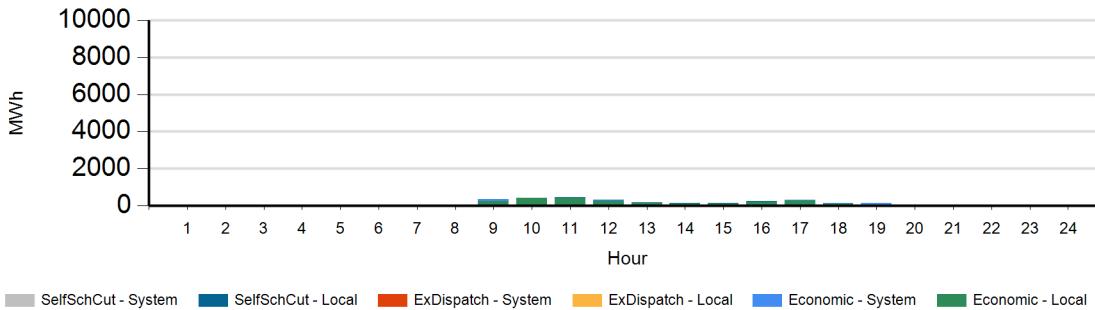
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

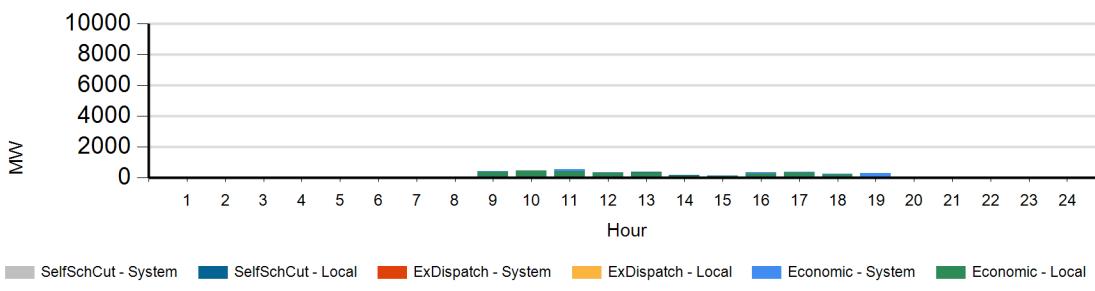
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

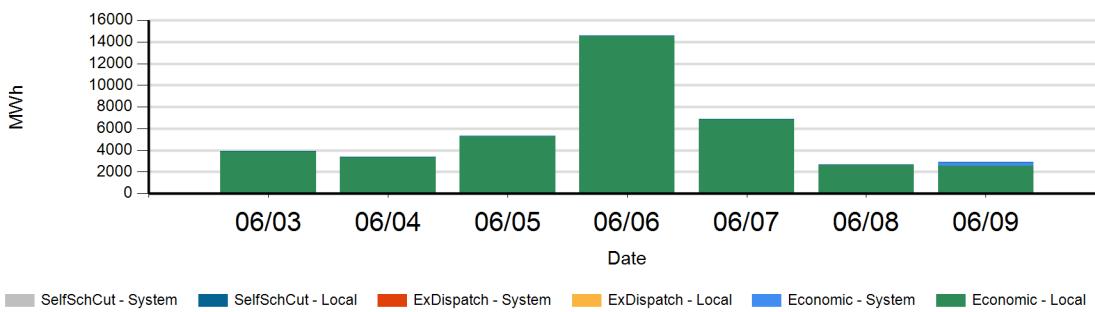
1. Hourly wind/solar generation curtailment energy in MWh. - 6/9/2023



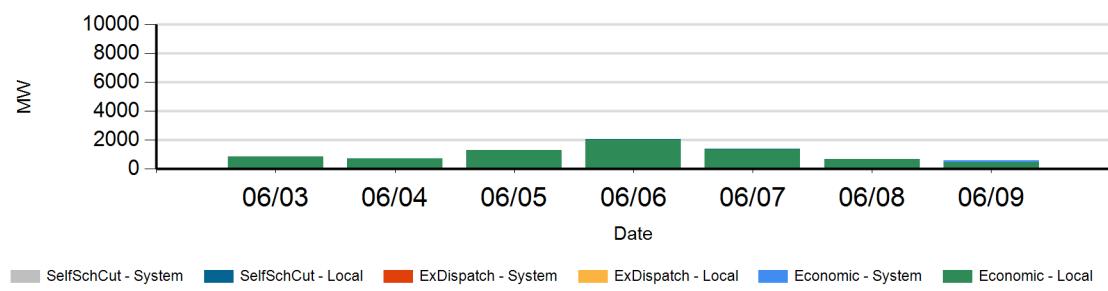
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 6/9/2023



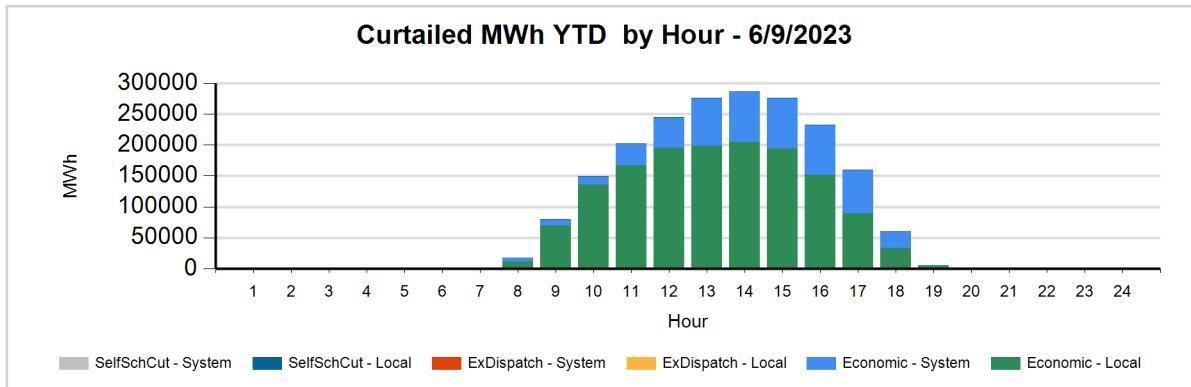
3. Daily wind/solar generation curtailment energy in MWh on a 7-day basis. - 6/9/2023



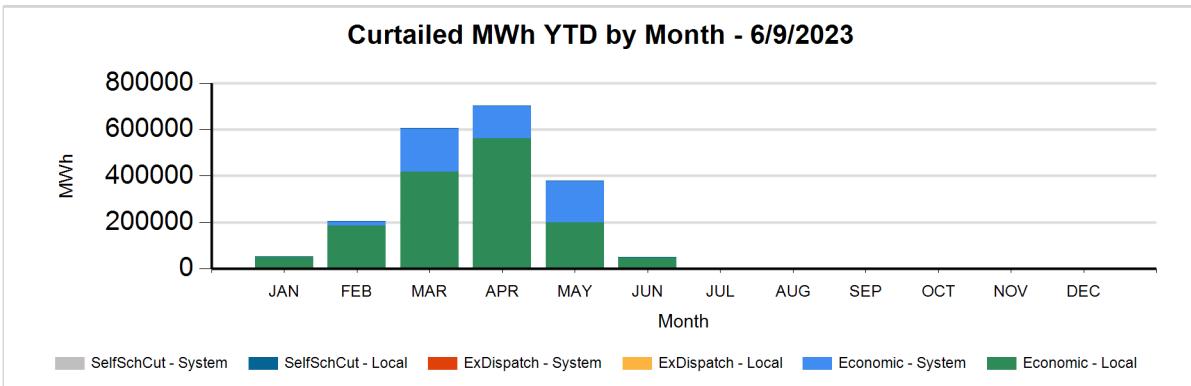
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 6/9/2023



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 - 6/9/2023
LocalEconomic	1,459,386
LocalSelfSchCut	687
SystemEconomic	536,605
TOTAL	1,996,678

Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
06/09	1	Economic	Local	WIND	6	6
06/09	2	Economic	Local	WIND	6	7
06/09	3	Economic	Local	WIND	6	6
06/09	4	Economic	Local	WIND	6	6
06/09	5	Economic	Local	WIND	5	6
06/09	6	Economic	Local	WIND	4	6
06/09	7	Economic	Local	SOLR	2	23
06/09	7	Economic	Local	WIND	5	4
06/09	7	Economic	System	SOLR	1	
06/09	8	Economic	Local	SOLR	14	42
06/09	8	Economic	Local	WIND	7	8
06/09	8	Economic	System	SOLR	2	
06/09	9	Economic	Local	SOLR	149	299
06/09	9	Economic	Local	WIND	79	82
06/09	9	Economic	System	SOLR	110	32
06/09	10	Economic	Local	SOLR	352	360
06/09	10	Economic	Local	WIND	76	95
06/09	10	SelfSchCut	Local	SOLR	0	
06/09	11	Economic	Local	SOLR	359	365
06/09	11	Economic	Local	WIND	59	62
06/09	11	Economic	System	SOLR	43	128
06/09	11	SelfSchCut	Local	SOLR	2	
06/09	12	Economic	Local	SOLR	261	272
06/09	12	Economic	Local	WIND	14	14
06/09	12	Economic	System	WIND	12	29
06/09	12	SelfSchCut	Local	SOLR	6	9
06/09	13	Economic	Local	SOLR	167	336
06/09	13	Economic	Local	WIND	10	24
06/09	13	Economic	System	SOLR	2	
06/09	13	SelfSchCut	Local	SOLR	4	11
06/09	14	Economic	Local	SOLR	132	145

06/09	14	Economic	Local	WIND	8	9
06/09	14	Economic	System	SOLR	3	3
06/09	14	SelfSchCut	Local	SOLR	2	1
06/09	15	Economic	Local	SOLR	112	132
06/09	15	Economic	Local	WIND	8	3
06/09	15	Economic	System	SOLR	3	3
06/09	15	SelfSchCut	Local	SOLR	2	1
06/09	16	Economic	Local	SOLR	226	279
06/09	16	Economic	Local	WIND	9	10
06/09	16	Economic	System	SOLR	14	19
06/09	16	SelfSchCut	Local	SOLR	3	1
06/09	17	Economic	Local	SOLR	303	340
06/09	17	Economic	Local	WIND	10	10
06/09	17	Economic	System	SOLR	8	3
06/09	18	Economic	Local	SOLR	109	222
06/09	18	Economic	Local	WIND	9	9
06/09	18	Economic	System	SOLR	11	3
06/09	19	Economic	Local	SOLR	9	27
06/09	19	Economic	Local	WIND	11	11
06/09	19	Economic	System	SOLR	69	130
06/09	19	Economic	System	WIND	39	110
06/09	20	Economic	Local	WIND	8	10
06/09	20	Economic	System	SOLR	1	6
06/09	21	Economic	Local	WIND	7	7
06/09	22	Economic	Local	WIND	7	7
06/09	23	Economic	Local	WIND	7	7
06/09	24	Economic	Local	WIND	6	7

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.

