

Wind and Solar Curtailment May 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.

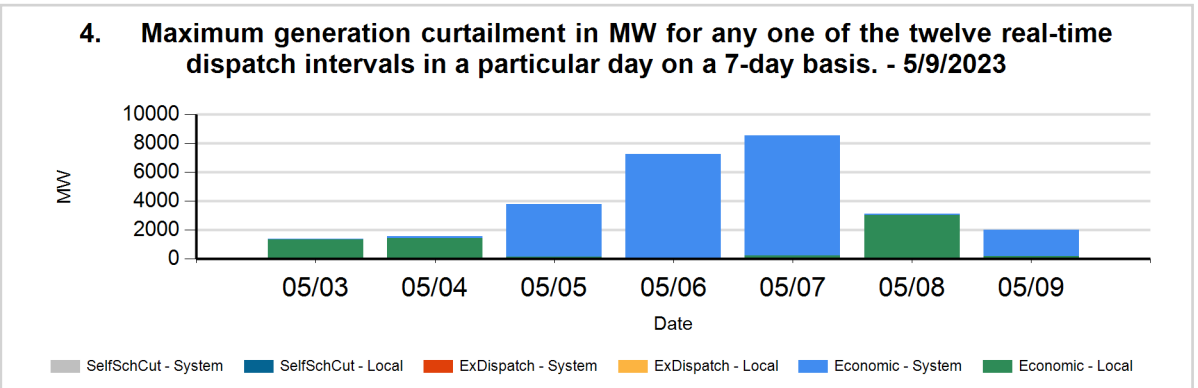
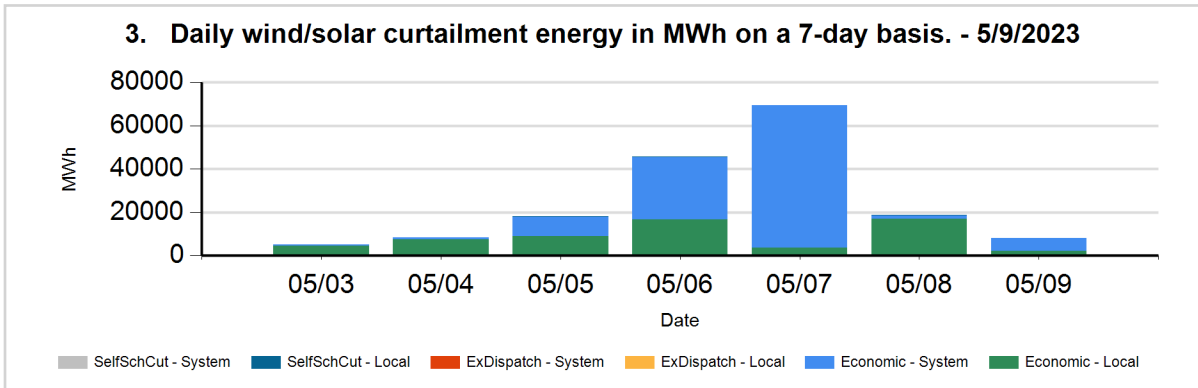
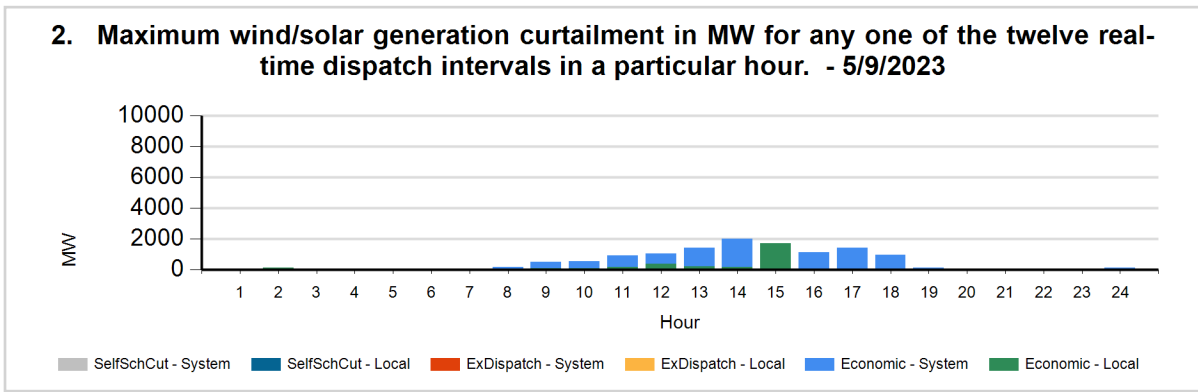
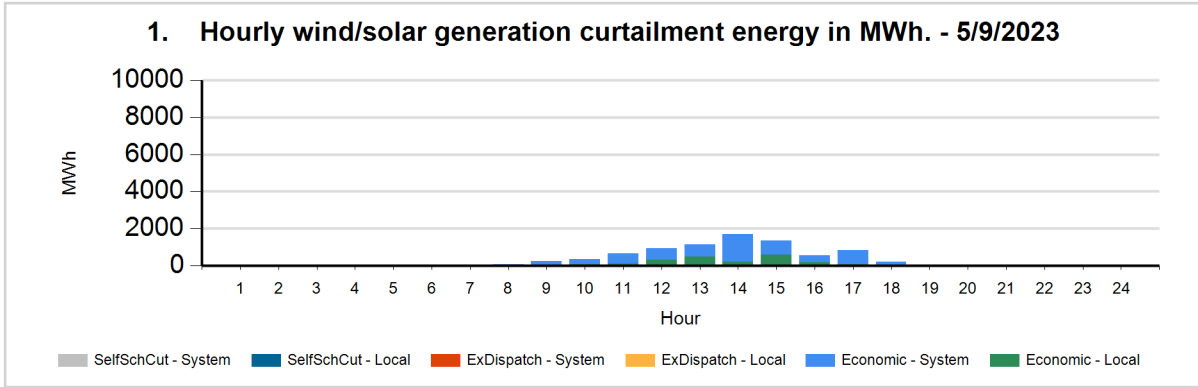
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

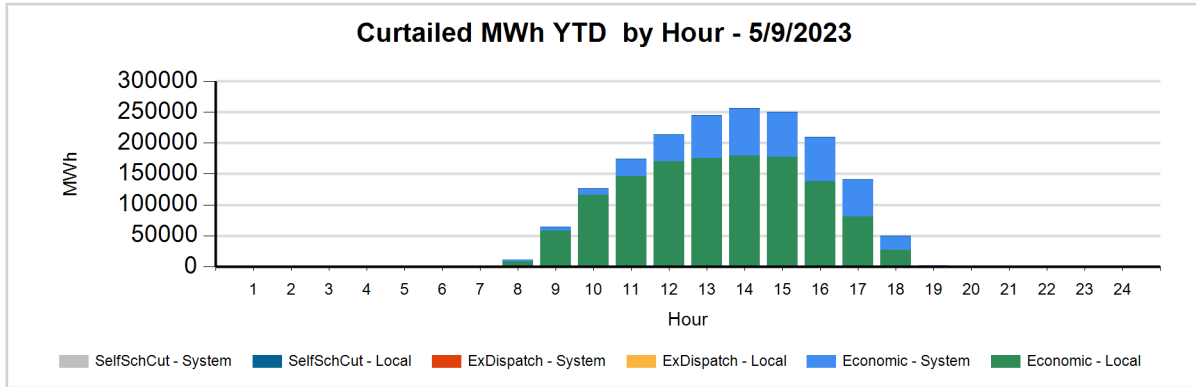
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

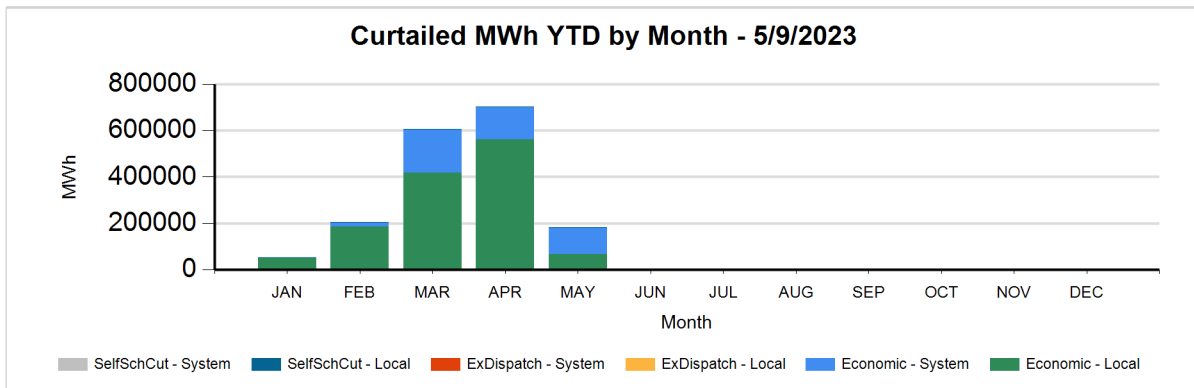
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/9/2023
LocalEconomic	1,280,060
LocalSelfSchCut	420
SystemEconomic	467,156
TOTAL	1,747,636

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/09	1	Economic	System	WIND	3	32
05/09	2	Economic	Local	WIND	30	109
05/09	2	Economic	System	WIND	1	
05/09	8	Economic	Local	SOLR	7	1
05/09	8	Economic	Local	WIND	7	
05/09	8	Economic	System	SOLR	15	90
05/09	8	Economic	System	WIND	26	84
05/09	9	Economic	Local	SOLR	35	68
05/09	9	Economic	Local	WIND	7	
05/09	9	Economic	System	SOLR	105	263
05/09	9	Economic	System	WIND	101	162
05/09	10	Economic	Local	SOLR	51	79
05/09	10	Economic	System	SOLR	166	346
05/09	10	Economic	System	WIND	127	107
05/09	11	Economic	Local	SOLR	117	143
05/09	11	Economic	System	SOLR	438	646
05/09	11	Economic	System	WIND	106	110
05/09	12	Economic	Local	SOLR	305	378
05/09	12	Economic	System	SOLR	510	564
05/09	12	Economic	System	WIND	119	110
05/09	13	Economic	Local	SOLR	483	187
05/09	13	Economic	System	SOLR	534	1036
05/09	13	Economic	System	WIND	138	173
05/09	14	Economic	Local	SOLR	197	153
05/09	14	Economic	System	SOLR	1284	1619
05/09	14	Economic	System	WIND	208	214
05/09	15	Economic	Local	SOLR	508	1471
05/09	15	Economic	Local	WIND	60	220
05/09	15	Economic	System	SOLR	656	
05/09	15	Economic	System	WIND	132	
05/09	16	Economic	Local	SOLR	156	45

05/09	16	Economic	System	SOLR	283	915
05/09	16	Economic	System	WIND	104	148
05/09	17	Economic	Local	SOLR	61	
05/09	17	Economic	Local	WIND	20	
05/09	17	Economic	System	SOLR	615	1207
05/09	17	Economic	System	WIND	137	212
05/09	18	Economic	Local	SOLR	25	4
05/09	18	Economic	Local	WIND	10	
05/09	18	Economic	System	SOLR	121	816
05/09	18	Economic	System	WIND	62	129
05/09	19	Economic	Local	SOLR	18	45
05/09	19	Economic	System	WIND	11	82
05/09	24	Economic	System	WIND	19	114

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.