

Wind and Solar Curtailment May 06, 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 systemwide oversupply.
- 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.

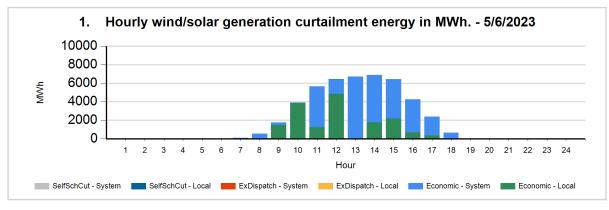
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

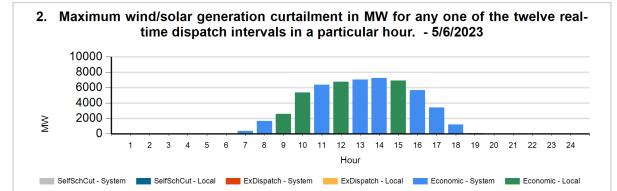
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

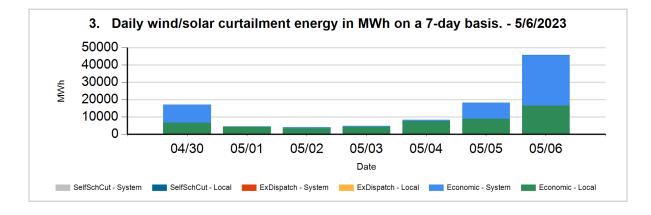
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

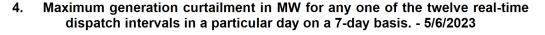


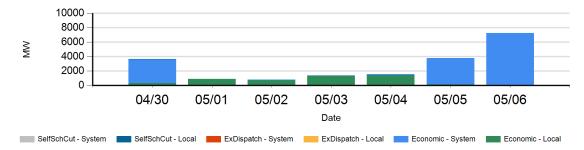
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





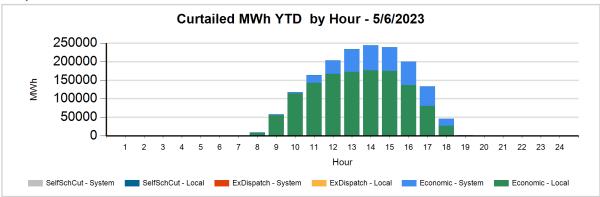




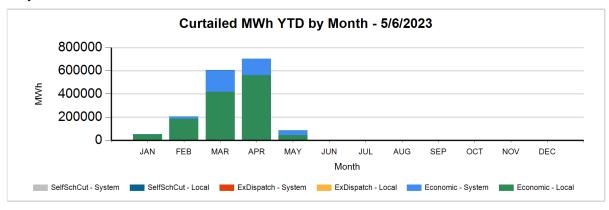




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 5/6/2023
LocalEconomic	1,257,491
LocalSelfSchCut	391
SystemEconomic	393,802
TOTAL	1,651,683



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/06		Economic	Local	WIND	8	52
05/06	3	Economic	System	WIND	0	
05/06	7	Economic	Local	SOLR	0	4
05/06	7	Economic	System	SOLR	24	260
05/06	7	Economic	System	WIND	61	111
05/06	8	Economic	Local	SOLR	30	68
05/06	8	Economic	Local	WIND	15	
05/06	8	Economic	System	SOLR	385	1363
05/06	8	Economic	System	WIND	122	222
05/06	9	Economic	Local	SOLR	1365	2354
05/06	9	Economic	Local	WIND	114	208
05/06	9	Economic	System	SOLR	240	
05/06	9	Economic	System	WIND	57	
05/06	9	SelfSchCut	Local	SOLR	0	
05/06	10	Economic	Local	SOLR	3757	5200
05/06	10	Economic	Local	WIND	140	166
05/06	10	Economic	System	WIND	17	22
05/06	10	SelfSchCut	Local	SOLR	0	
05/06	11	Economic	Local	SOLR	1209	14
05/06	11	Economic	Local	WIND	39	
05/06	11	Economic	System	SOLR	4117	5891
05/06	11	Economic	System	WIND	272	467
05/06	11	SelfSchCut	Local	SOLR	1	
05/06	12	Economic	Local	SOLR	4590	6229
05/06	12	Economic	Local	WIND	259	468
05/06	12	Economic	System	SOLR	1465	
05/06	12	Economic	System	WIND	112	52
05/06	12	SelfSchCut	Local	SOLR	1	12
05/06	13	Economic	Local	SOLR	10	12
05/06	13	Economic	System	SOLR	6213	6473
05/06	13	Economic	System	WIND	474	547



13	1592	SOLR	Local	14 Economic	5 14	05/06
	155	WIND	Local	14 Economic	5 14	05/06
6557	4711	SOLR	System	14 Economic	5 14	05/06
682	412	WIND	System	14 Economic	14	05/06
6159	1986	SOLR	Local	15 Economic	5 15	05/06
750	199	WIND	Local	15 Economic	5 15	05/06
	3889	SOLR	System	15 Economic	5 15	05/06
	353	WIND	System	15 Economic	15	05/06
	635	SOLR	Local	16 Economic	16	05/06
	44	WIND	Local	16 Economic	16	05/06
5257	3342	SOLR	System	16 Economic	16	05/06
394	221	WIND	System	16 Economic	6 16	05/06
	308	SOLR	Local	17 Economic	i 17	05/06
	30	WIND	Local	17 Economic	5 17	05/06
3266	1911	SOLR	System	17 Economic	i 17	05/06
158	150	WIND	System	17 Economic	5 17	05/06
1011	508	SOLR	System	18 Economic	18	05/06
197	134	WIND	System	18 Economic	18	05/06
	10	WIND	Local	19 Economic	i 19	05/06
62	9	WIND	System	19 Economic	5 19	05/06

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.