

Wind and Solar Curtailment March 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 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.

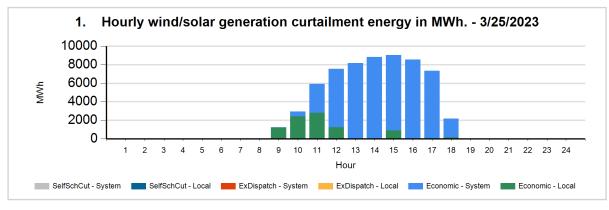
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

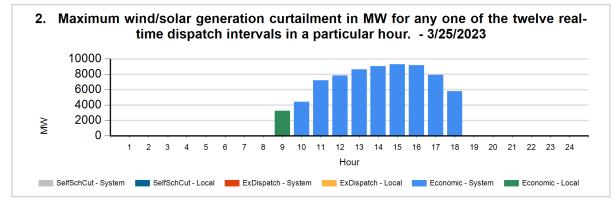
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

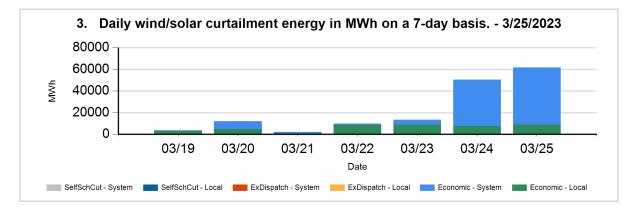
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

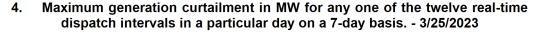


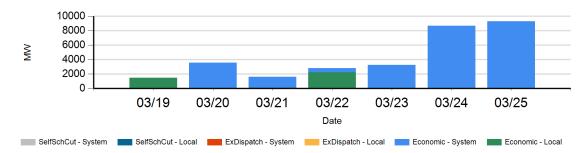
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





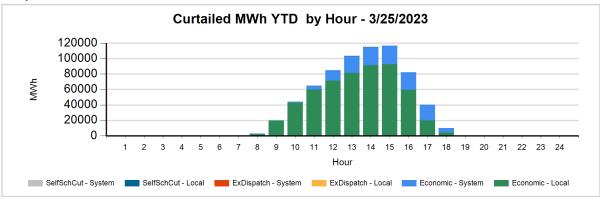




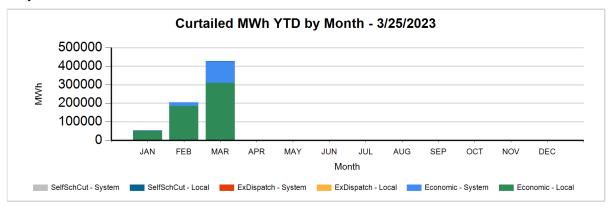




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 3/25/2023
LocalEconomic	544,613
LocalSelfSchCut	12
SystemEconomic	140,360
TOTAL	684,985



Data used to produce hourly chart

RTAILED MW	CURTAILED MWH	FUEL TYPE	REASON	CURT TYPE	HOU R	DATE
29	9	SOLR	Local	B Economic	8	03/25
	0	SOLR	System	B Economic	8	03/25
2879	1078	SOLR	Local	9 Economic	9	03/25
356	157	WIND	Local	9 Economic	9	03/25
	6	SOLR	System	9 Economic	9	03/25
99	2181	SOLR	Local) Economic	10	03/25
	224	WIND	Local) Economic	10	03/25
4104	529	SOLR	System) Economic	10	03/25
208	21	WIND	System) Economic	10	03/25
53	2640	SOLR	Local	1 Economic	11	03/25
	143	WIND	Local	1 Economic	11	03/25
6844	2991	SOLR	System	1 Economic	11	03/25
311	148	WIND	System	1 Economic	11	03/25
15	1195	SOLR	Local	2 Economic	12	03/25
	59	WIND	Local	2 Economic	12	03/25
7382	5959	SOLR	System	2 Economic	12	03/25
452	314	WIND	System	2 Economic	12	03/25
15	15	SOLR	Local	3 Economic	13	03/25
8099	7654	SOLR	System	3 Economic	13	03/25
505	498	WIND	System	3 Economic	13	03/25
15	15	SOLR	Local	4 Economic	14	03/25
8437	8229	SOLR	System	4 Economic	14	03/25
584	596	WIND	System	4 Economic	14	03/25
	828	SOLR	Local	5 Economic	15	03/25
	62	WIND	Local	5 Economic	15	03/25
8522	7459	SOLR	System	5 Economic	15	03/25
762	675	WIND	System	5 Economic	15	03/25
8491	7858	SOLR	System	6 Economic	16	03/25
670	691	WIND	System	6 Economic	16	03/25
7284	6699	SOLR	System	7 Economic	17	03/25
657	646	WIND	System	7 Economic	17	03/25



03/25	18	Economic	Local	SOLR	126	
03/25	18	Economic	Local	WIND	25	
03/25	18	Economic	System	SOLR	1740	5193
03/25	18	Economic	System	WIND	299	604
03/25	19	Economic	Local	SOLR	0	2
03/25	19	Economic	System	SOLR	0	5

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.