

Wind and Solar Curtailment May 21, 2022

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.

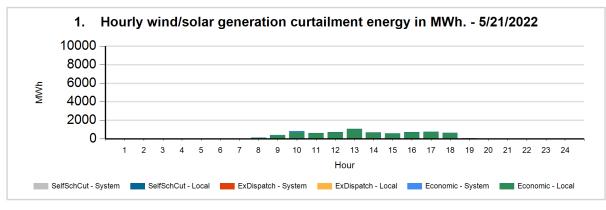
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

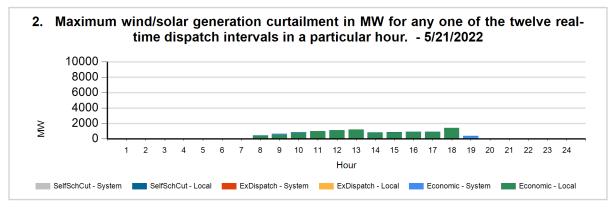
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

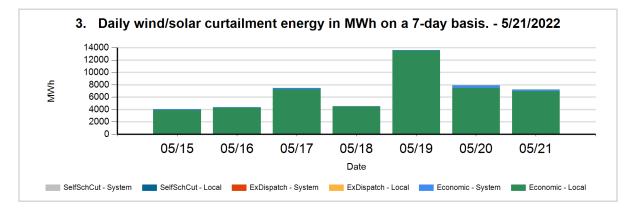
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

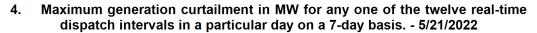


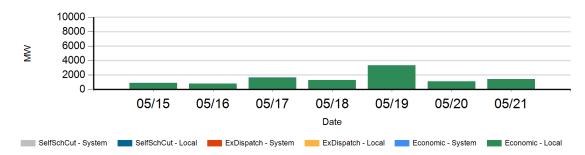
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





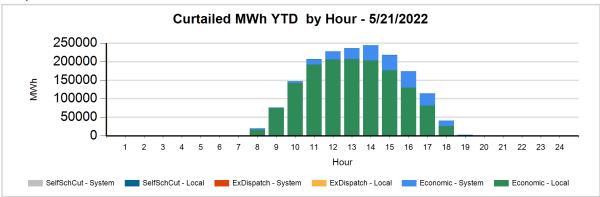




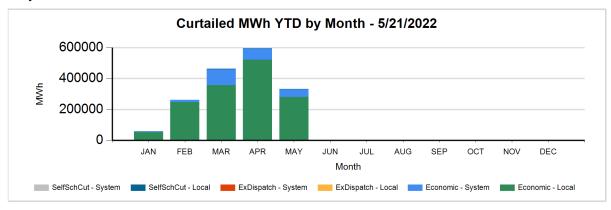




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 5/21/2022
LocalEconomic	1,456,270
LocalSelfSchCut	4,777
SystemEconomic	250,175
TOTAL	1,711,222



Data used to produce hourly chart

AILED MW	CURTAILED MWH CI	FUEL TYPE	REASON	U CURT TYPE	HOU R	DATE
	1	SOLR	Local	7 Economic	7	05/21
49	4	SOLR	System	7 Economic	7	05/21
427	122	SOLR	Local	8 Economic	8	05/21
11	5	WIND	Local	8 Economic	8	05/21
27	10	SOLR	System	8 Economic	8	05/21
512	359	SOLR	Local	9 Economic	9	05/21
22	15	WIND	Local	9 Economic	9	05/21
144	47	SOLR	System	9 Economic	9	05/21
	1	WIND	System	9 Economic	9	05/21
750	663	SOLR	Local	0 Economic	10	05/21
28	28	WIND	Local	0 Economic	10	05/21
114	118	SOLR	System	0 Economic	10	05/21
	0	WIND	System	0 Economic	10	05/21
	1	SOLR	Local	0 SelfSchCut	10	05/21
976	606	SOLR	Local	11 Economic	11	05/21
19	12	WIND	Local	11 Economic	11	05/21
	2	SOLR	System	11 Economic	11	05/21
	3	SOLR	Local	1 SelfSchCut	11	05/21
1080	680	SOLR	Local	2 Economic	12	05/21
24	7	WIND	Local	2 Economic	12	05/21
	29	SOLR	System	2 Economic	12	05/21
	1	WIND	System	2 Economic	12	05/21
	1	SOLR	Local	2 SelfSchCut	12	05/21
1206	1069	SOLR	Local	3 Economic	13	05/21
7	3	WIND	Local	3 Economic	13	05/21
	3	SOLR	Local	3 SelfSchCut	13	05/21
824	678	SOLR	Local	4 Economic	14	05/21
	0	WIND	Local	4 Economic	14	05/21
14	4	SOLR	Local	4 SelfSchCut	14	05/21
845	572	SOLR	Local	5 Economic	15	05/21
11	3	SOLR	Local	5 SelfSchCut	15	05/21



05/21	16	Economic	Local	SOLR	711	897
05/21	16	SelfSchCut	Local	SOLR	2	2
05/21	17	Economic	Local	SOLR	739	911
05/21	17	Economic	Local	WIND	1	
05/21	17	Economic	System	WIND	3	
05/21	17	SelfSchCut	Local	SOLR	3	5
05/21	18	Economic	Local	SOLR	645	1414
05/21	18	Economic	Local	WIND	2	14
05/21	18	Economic	System	WIND	1	
05/21	19	Economic	Local	SOLR	6	18
05/21	19	Economic	System	SOLR	47	297
05/21	19	Economic	System	WIND	9	50
05/21	19	SelfSchCut	Local	SOLR	5	15

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.