

Wind and Solar Curtailment May 04, 2021

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.

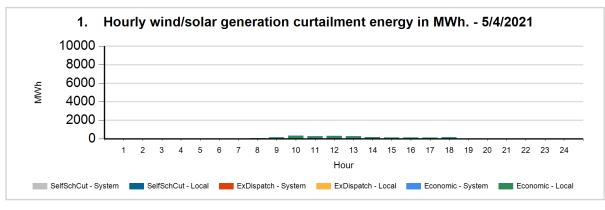
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

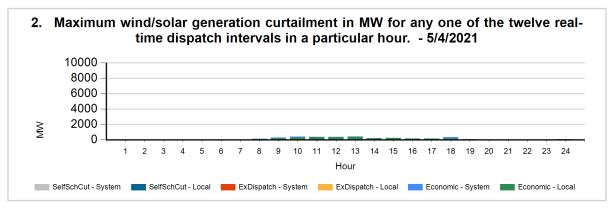
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

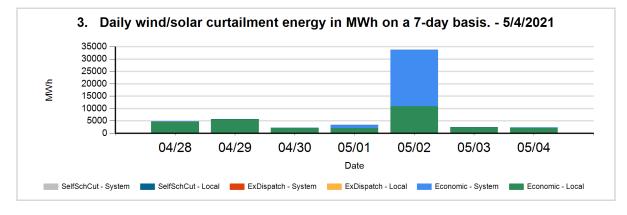
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

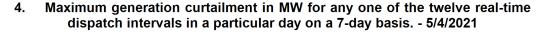


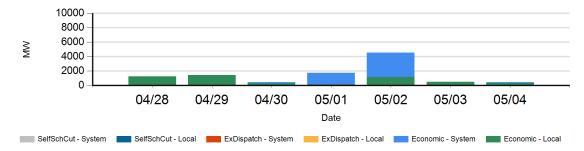
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





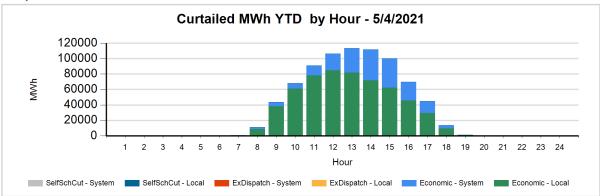




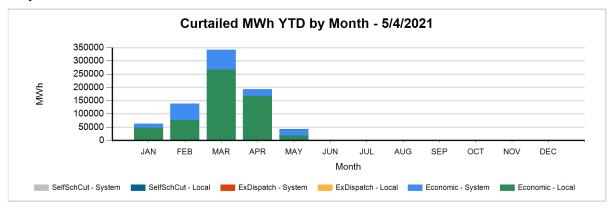




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 5/4/2021		
LocalEconomic	573,285		
LocalSelfSchCut	2,559		
SystemEconomic	200,442		
TOTAL	776,286		



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/04	7	Economic	Local	SOLR	2	11
05/04	7	Economic	System	SOLR	0	
05/04	8	Economic	Local	SOLR	35	71
05/04	8	Economic	Local	WIND	43	67
05/04	8	Economic	System	SOLR	2	
05/04	8	SelfSchCut	Local	SOLR	1	2
05/04	9	Economic	Local	SOLR	164	186
05/04	9	Economic	System	SOLR	7	86
05/04	10	Economic	Local	SOLR	315	297
05/04	10	Economic	Local	WIND	0	
05/04	10	Economic	System	SOLR	13	127
05/04	11	Economic	Local	SOLR	285	374
05/04	11	Economic	Local	WIND	0	3
05/04	11	SelfSchCut	Local	SOLR	1	4
05/04	12	Economic	Local	SOLR	292	350
05/04	12	Economic	Local	WIND	1	
05/04	12	SelfSchCut	Local	SOLR	6	15
05/04	13	Economic	Local	SOLR	253	371
05/04	13	Economic	Local	WIND	0	1
05/04	13	SelfSchCut	Local	SOLR	5	22
05/04	14	Economic	Local	SOLR	172	173
05/04	14	SelfSchCut	Local	SOLR	8	19
05/04	15	Economic	Local	SOLR	145	238
05/04	15	SelfSchCut	Local	SOLR	2	
05/04	16	Economic	Local	SOLR	150	162
05/04	16	Economic	System	SOLR	0	
05/04	16	SelfSchCut	Local	SOLR	1	3
05/04	17	Economic	Local	SOLR	151	159
05/04	17	SelfSchCut	Local	SOLR	0	
05/04	18	Economic	Local	SOLR	90	115
05/04	18	Economic	Local	WIND	41	40



05/04	18	Economic	System	SOLR	14	136
05/04	18	SelfSchCut	Local	WIND	24	51
05/04	19	Economic	Local	SOLR	24	58
05/04	21	Economic	Local	WIND	11	30
05/04	24	Economic	Local	WIND	19	68

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.