

Wind and Solar Curtailment May 29, 2020

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.

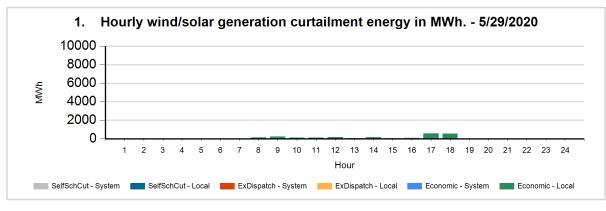
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

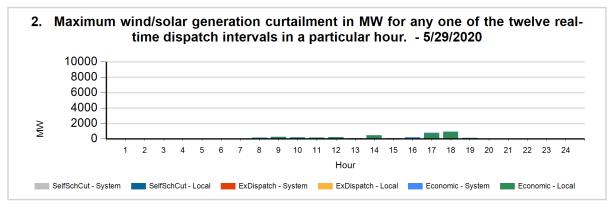
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

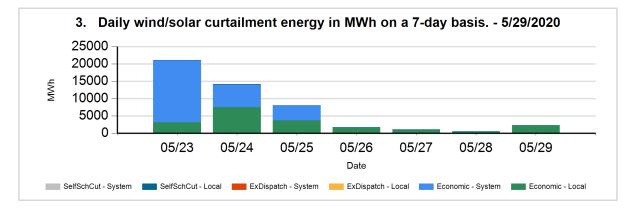
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

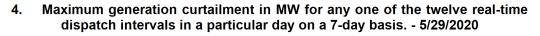


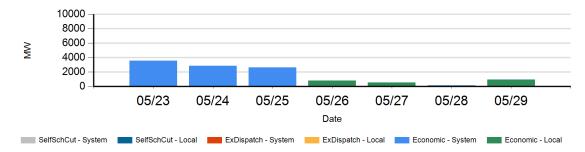
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





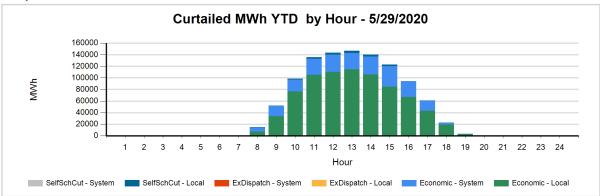




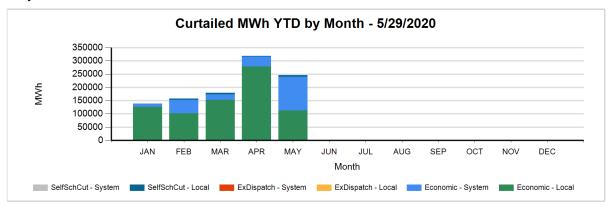




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 5/29/2020
LocalEconomic	772,144
LocalSelfSchCut	19,839
SystemEconomic	246,555
TOTAL	1,038,538



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/29	3	Economic	Local	WIND	4	18
05/29	4	Economic	Local	WIND	9	33
05/29	4	Economic	System	WIND	1	
05/29	6	Economic	Local	WIND	2	22
05/29	7	Economic	Local	SOLR	4	17
05/29	7	Economic	Local	WIND	0	
05/29	8	Economic	Local	SOLR	37	34
05/29	8	Economic	Local	WIND	90	133
05/29	8	Economic	System	SOLR	8	9
05/29	8	SelfSchCut	Local	SOLR	1	
05/29	9	Economic	Local	SOLR	58	134
05/29	9	Economic	Local	WIND	154	114
05/29	9	Economic	System	SOLR	10	
05/29	9	SelfSchCut	Local	SOLR	3	7
05/29	10	Economic	Local	SOLR	66	49
05/29	10	Economic	Local	WIND	34	73
05/29	10	Economic	System	SOLR	20	81
05/29	11	Economic	Local	SOLR	67	90
05/29	11	Economic	Local	WIND	50	71
05/29	11	Economic	System	SOLR	5	
05/29	12	Economic	Local	SOLR	59	67
05/29	12	Economic	Local	WIND	117	141
05/29	12	SelfSchCut	Local	SOLR	10	10
05/29	13	Economic	Local	SOLR	51	51
05/29	13	Economic	Local	WIND	1	8
05/29	13	SelfSchCut	Local	SOLR	5	10
05/29	14	Economic	Local	SOLR	153	474
05/29	14	Economic	Local	WIND	0	
05/29	15	Economic	Local	SOLR	59	89
05/29	15	Economic	System	WIND	0	
05/29	16	Economic	Local	SOLR	28	75



05/29	16	Economic	System	SOLR	56	118
05/29	17	Economic	Local	SOLR	565	702
05/29	17	Economic	System	SOLR	33	101
05/29	18	Economic	Local	SOLR	557	911
05/29	18	SelfSchCut	Local	SOLR	5	9
05/29	19	Economic	Local	SOLR	25	104
05/29	20	Economic	Local	SOLR	1	4

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.