

## Wind and Solar Curtailment May 25, 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 congestion<sup>3</sup>.
- 2. Economic System: Market dispatch of generators with economic bids to mitigate system-wide 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.

<sup>1</sup>Only 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.

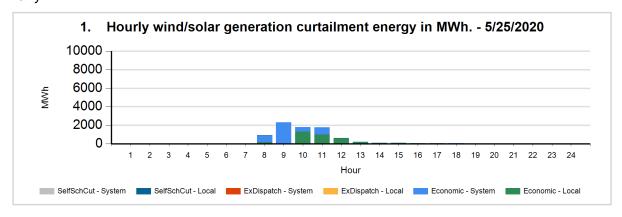
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

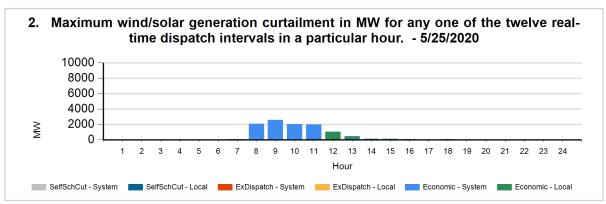
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

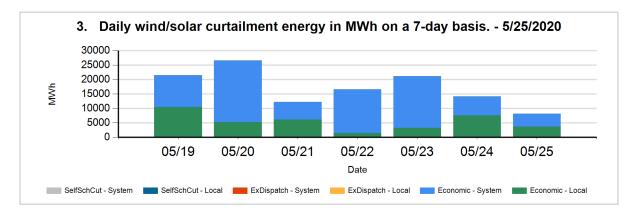
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

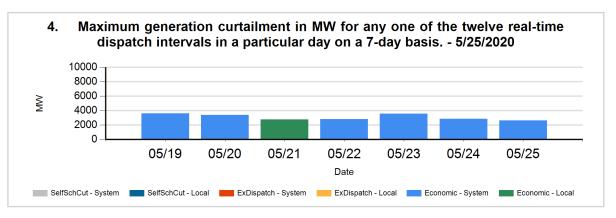


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



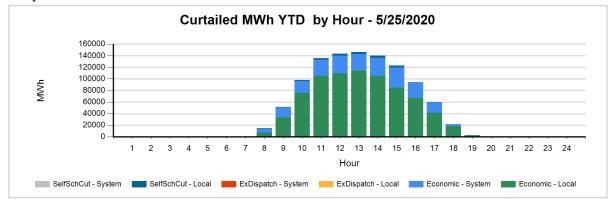




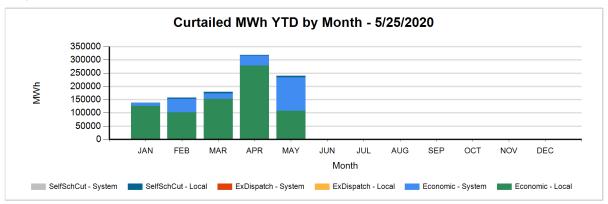




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 5/25/2020
LocalEconomic	766,645
LocalSelfSchCut	19,767
SystemEconomic	246,359
TOTAL	1,032,771



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/25	6	Economic	Local	SOLR	2	22
05/25	7	Economic	Local	SOLR	19	84
05/25	7	Economic	System	SOLR	7	
05/25	7	SelfSchCut	Local	SOLR	10	14
05/25	8	Economic	Local	SOLR	178	
05/25	8	Economic	Local	WIND	1	
05/25	8	Economic	System	SOLR	726	2063
05/25	8	Economic	System	WIND	11	13
05/25	8	SelfSchCut	Local	SOLR	7	
05/25	9	Economic	Local	SOLR	15	3
05/25	9	Economic	System	SOLR	2284	2593
05/25	9	Economic	System	WIND	6	3
05/25	10	Economic	Local	SOLR	1320	54
05/25	10	Economic	Local	WIND	1	
05/25	10	Economic	System	SOLR	486	1983
05/25	10	Economic	System	WIND	0	
05/25	11	Economic	Local	SOLR	1003	79
05/25	11	Economic	Local	WIND	1	
05/25	11	Economic	System	SOLR	755	1903
05/25	11	Economic	System	WIND	1	2
05/25	11	SelfSchCut	Local	SOLR	10	
05/25	12	Economic	Local	SOLR	596	1019
05/25	12	SelfSchCut	Local	SOLR	21	20
05/25	13	Economic	Local	SOLR	197	413
05/25	13	SelfSchCut	Local	SOLR	21	20
05/25	14	Economic	Local	SOLR	87	104
05/25	14	SelfSchCut	Local	SOLR	1	3
05/25	15	Economic	Local	SOLR	76	80
05/25	15	SelfSchCut	Local	SOLR	20	24
05/25	16	Economic	Local	SOLR	68	74
05/25	17	Economic	Local	SOLR	54	58



05/25	18	Economic	Local	SOLR	57	46
05/25	18	Economic	System	SOLR	3	34
05/25	19	Economic	Local	SOLR	15	31
05/25	20	Economic	Local	SOLR	2	9

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.