

Wind and Solar Curtailment May 05, 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 system-wide oversupply⁴.
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.

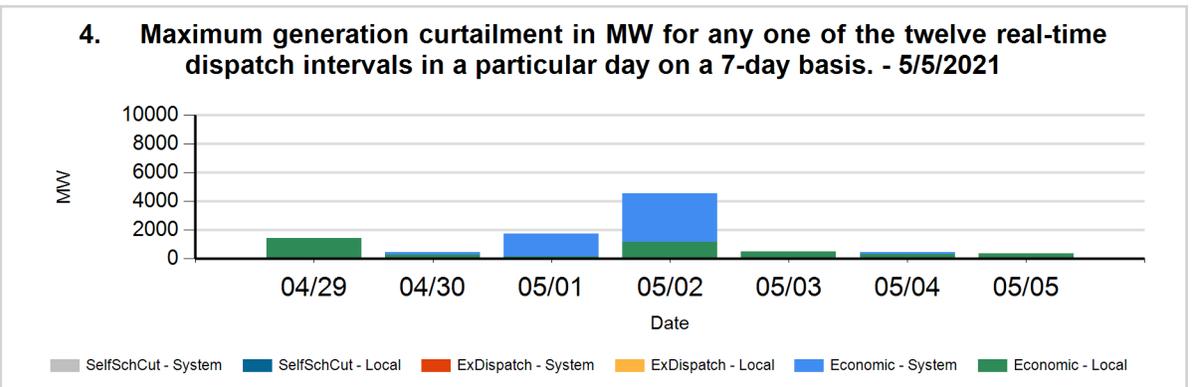
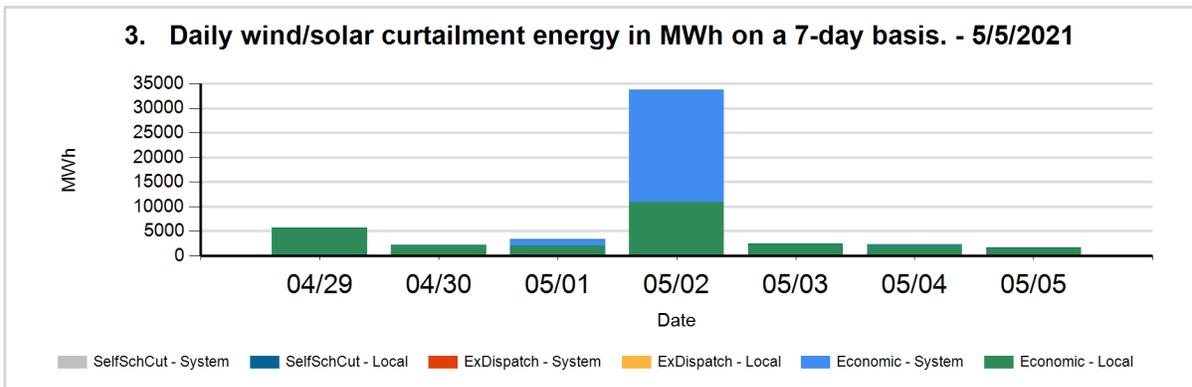
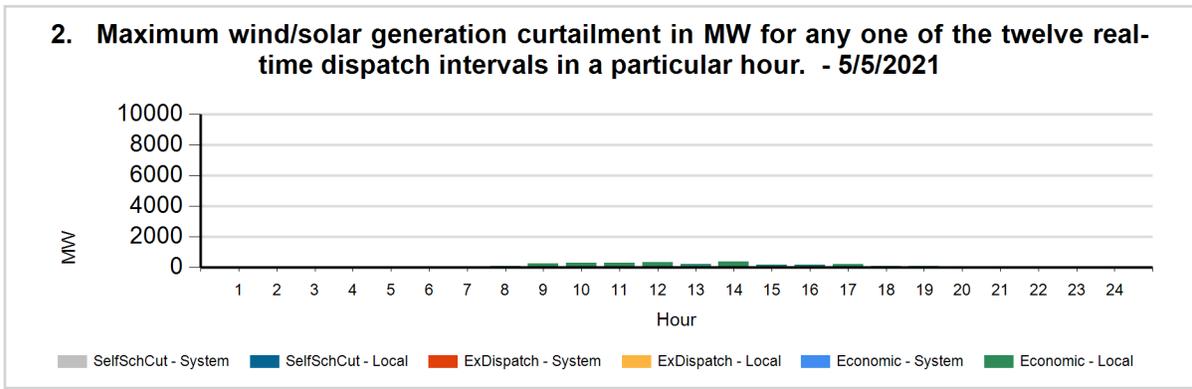
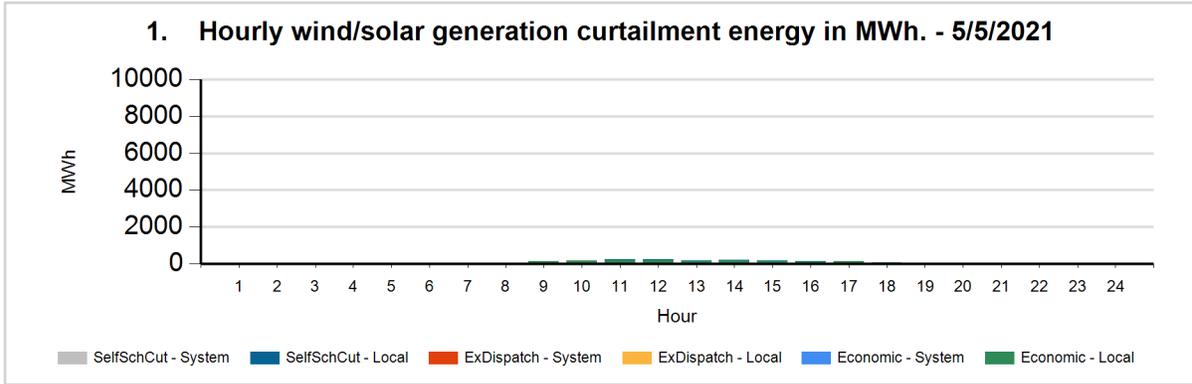
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

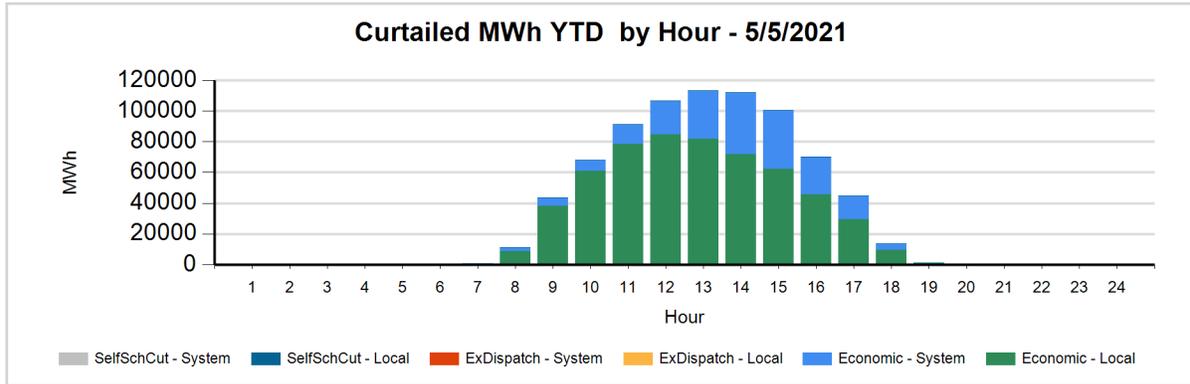
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

⁴For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

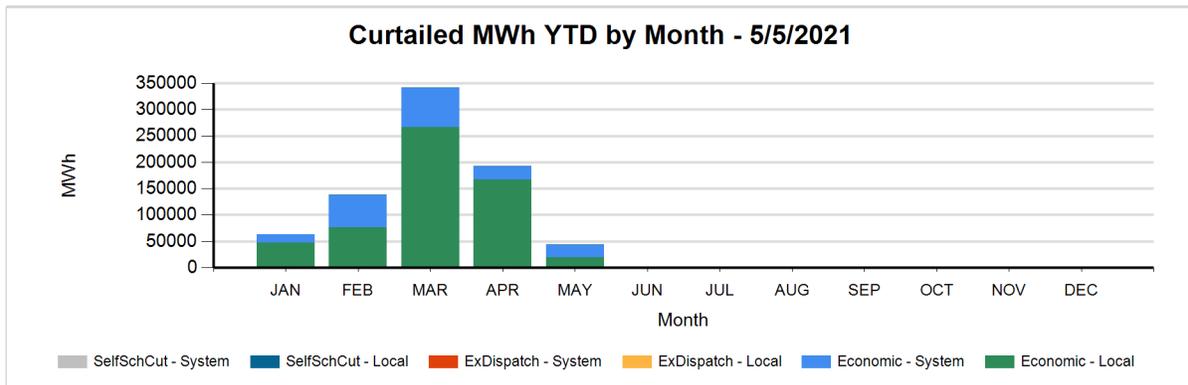
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/5/2021
LocalEconomic	574,997
LocalSelfSchCut	2,568
SystemEconomic	200,443
TOTAL	778,009

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/05	1	Economic	Local	WIND	4	24
05/05	7	Economic	Local	SOLR	4	28
05/05	8	Economic	Local	SOLR	36	72
05/05	9	Economic	Local	SOLR	121	247
05/05	10	Economic	Local	SOLR	167	282
05/05	10	SelfSchCut	Local	SOLR	0	
05/05	11	Economic	Local	SOLR	241	301
05/05	11	SelfSchCut	Local	SOLR	1	
05/05	12	Economic	Local	SOLR	223	330
05/05	12	SelfSchCut	Local	SOLR	2	
05/05	13	Economic	Local	SOLR	169	180
05/05	13	Economic	Local	WIND	0	5
05/05	13	SelfSchCut	Local	SOLR	2	10
05/05	14	Economic	Local	SOLR	190	351
05/05	14	Economic	System	SOLR	1	
05/05	14	SelfSchCut	Local	SOLR	1	
05/05	15	Economic	Local	SOLR	164	167
05/05	15	SelfSchCut	Local	SOLR	2	7
05/05	16	Economic	Local	SOLR	126	136
05/05	16	Economic	Local	WIND	22	40
05/05	16	SelfSchCut	Local	SOLR	1	1
05/05	17	Economic	Local	SOLR	124	136
05/05	17	Economic	Local	WIND	23	47
05/05	18	Economic	Local	SOLR	74	97
05/05	19	Economic	Local	SOLR	26	63
05/05	23	Economic	Local	WIND	0	1
05/05	23	Economic	System	WIND	1	7

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.



California ISO