

Wind and Solar Curtailment May 01, 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 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.

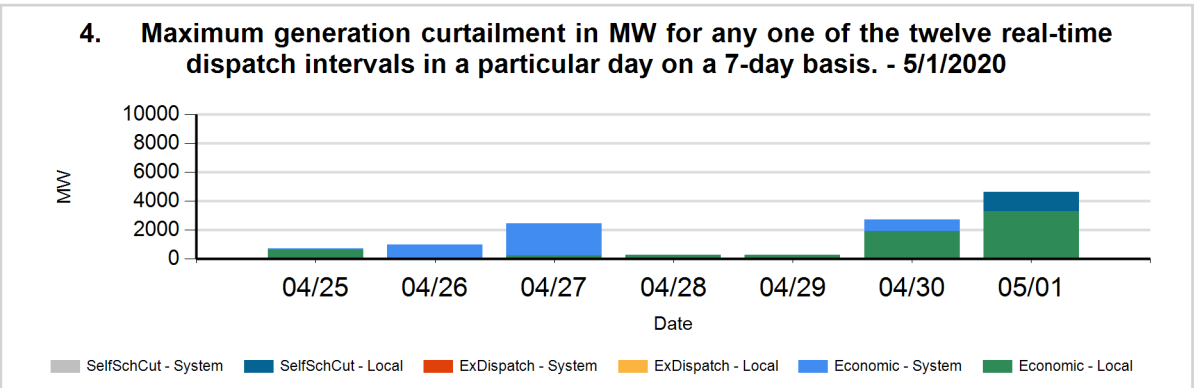
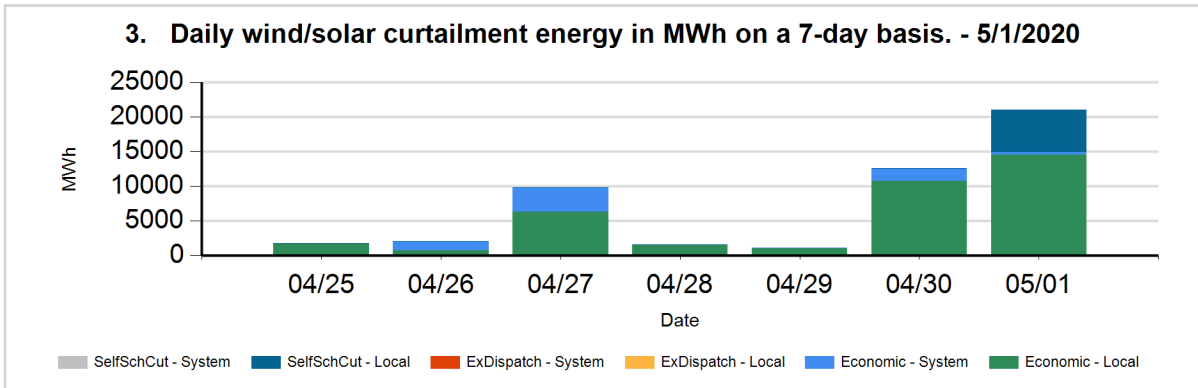
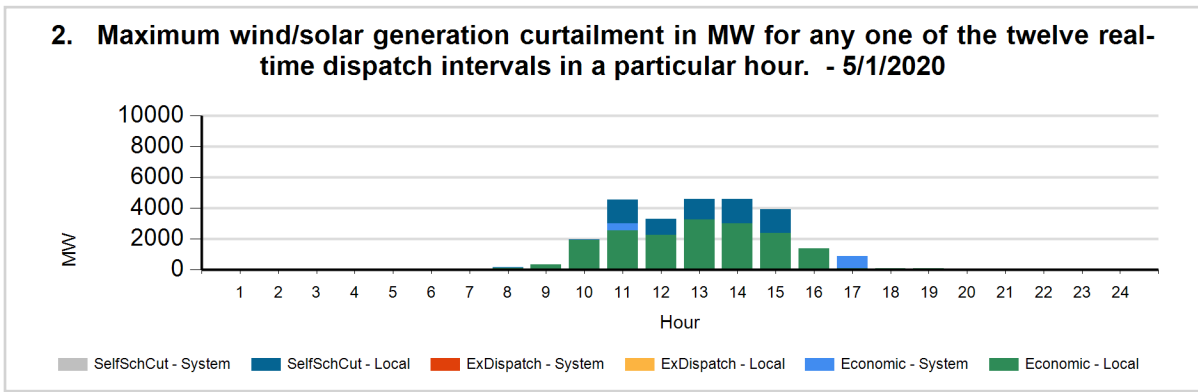
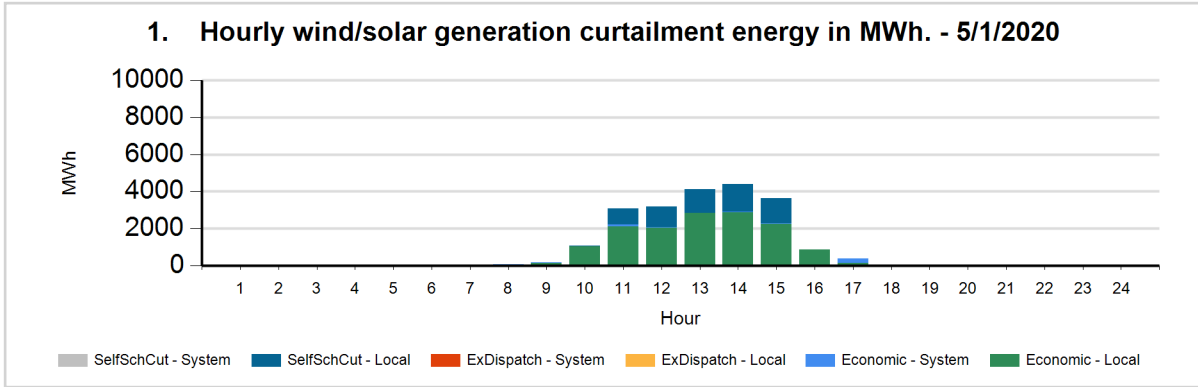
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

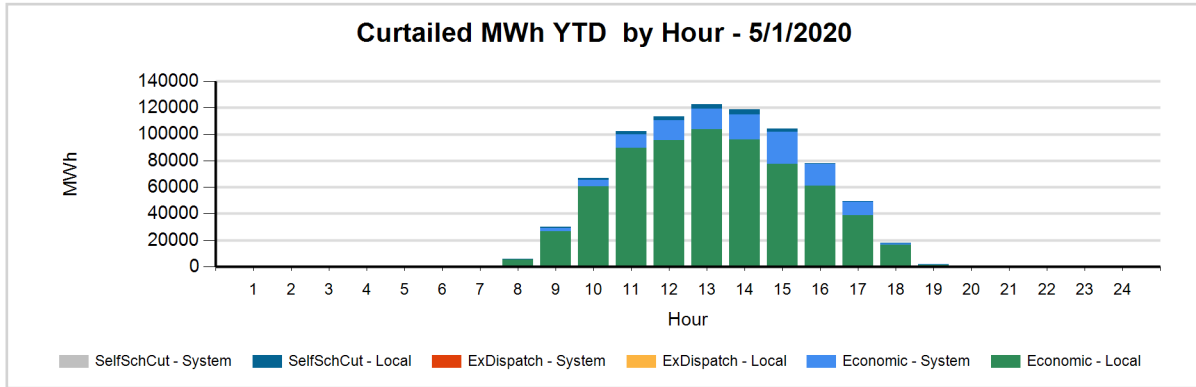
⁴For more information on oversupply conditions, please see:

https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

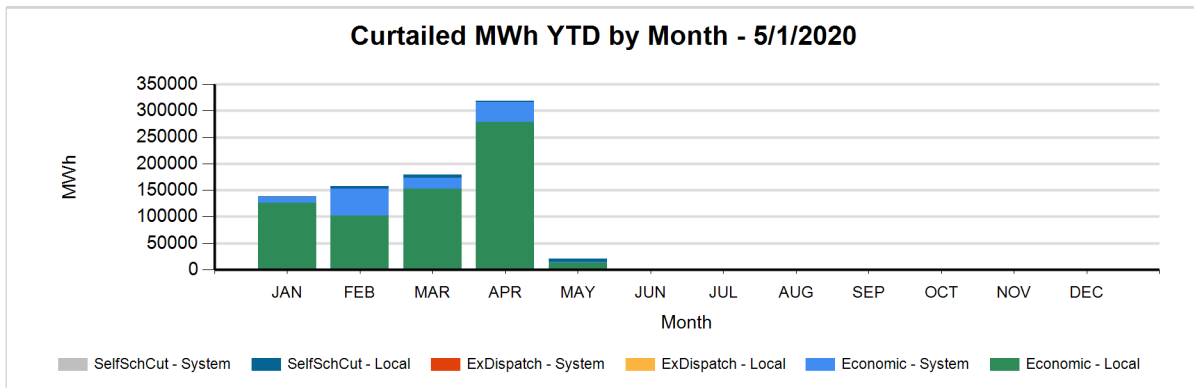
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/1/2020
LocalEconomic	674,047
LocalSelfSchCut	19,404
SystemEconomic	120,144
TOTAL	813,595

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/01	7	Economic	Local	SOLR	1	5
05/01	7	Economic	System	SOLR	3	19
05/01	8	Economic	Local	SOLR	64	139
05/01	8	Economic	Local	WIND	0	
05/01	8	Economic	System	SOLR	12	14
05/01	9	Economic	Local	SOLR	176	312
05/01	9	Economic	System	SOLR	8	
05/01	10	Economic	Local	SOLR	900	1393
05/01	10	Economic	Local	WIND	144	517
05/01	10	Economic	System	SOLR	18	28
05/01	10	SelfSchCut	Local	SOLR	1	2
05/01	11	Economic	Local	SOLR	1679	2044
05/01	11	Economic	Local	WIND	427	497
05/01	11	Economic	System	SOLR	120	442
05/01	11	Economic	System	WIND	1	
05/01	11	SelfSchCut	Local	SOLR	19	207
05/01	11	SelfSchCut	Local	WIND	843	1346
05/01	12	Economic	Local	SOLR	1661	1833
05/01	12	Economic	Local	WIND	408	403
05/01	12	Economic	System	SOLR	1	
05/01	12	SelfSchCut	Local	SOLR	3	2
05/01	12	SelfSchCut	Local	WIND	1101	1074
05/01	13	Economic	Local	SOLR	2408	2821
05/01	13	Economic	Local	WIND	425	448
05/01	13	SelfSchCut	Local	SOLR	26	25
05/01	13	SelfSchCut	Local	WIND	1260	1310
05/01	14	Economic	Local	SOLR	2449	2550
05/01	14	Economic	Local	WIND	452	454
05/01	14	Economic	System	SOLR	11	
05/01	14	SelfSchCut	Local	SOLR	100	172
05/01	14	SelfSchCut	Local	WIND	1371	1409

05/01	15	Economic	Local	SOLR	1858	1963
05/01	15	Economic	Local	WIND	404	401
05/01	15	Economic	System	SOLR	12	
05/01	15	Economic	System	WIND	1	
05/01	15	SelfSchCut	Local	SOLR	152	181
05/01	15	SelfSchCut	Local	WIND	1198	1363
05/01	16	Economic	Local	SOLR	852	1345
05/01	16	Economic	Local	WIND	10	12
05/01	17	Economic	Local	SOLR	149	58
05/01	17	Economic	System	SOLR	202	757
05/01	17	Economic	System	WIND	13	43
05/01	18	Economic	Local	SOLR	39	81
05/01	18	Economic	System	SOLR	3	
05/01	19	Economic	Local	SOLR	2	
05/01	19	Economic	Local	WIND	21	81
05/01	22	Economic	Local	WIND	1	5
05/01	24	Economic	Local	WIND	1	11

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.