

Wind and Solar Curtailment March 24, 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.

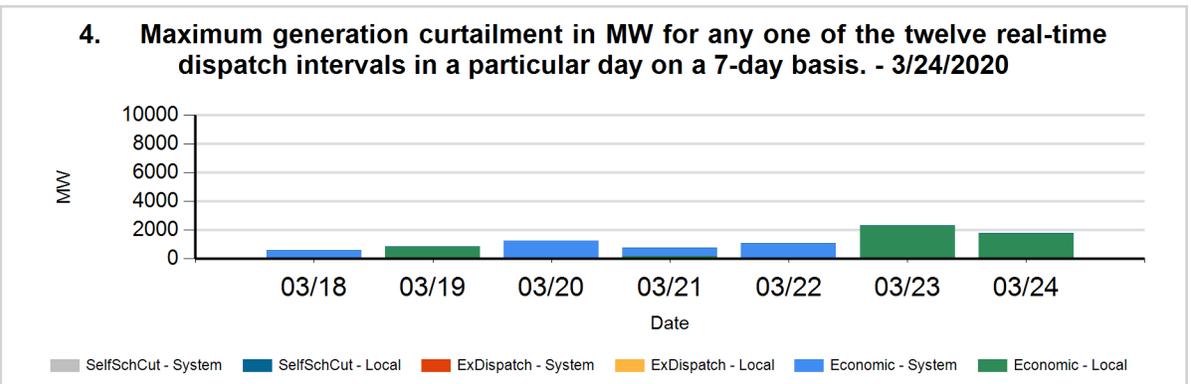
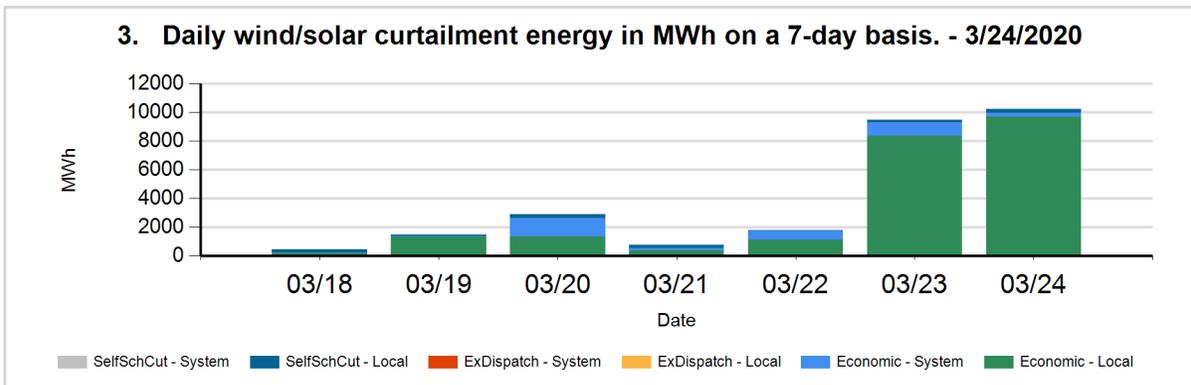
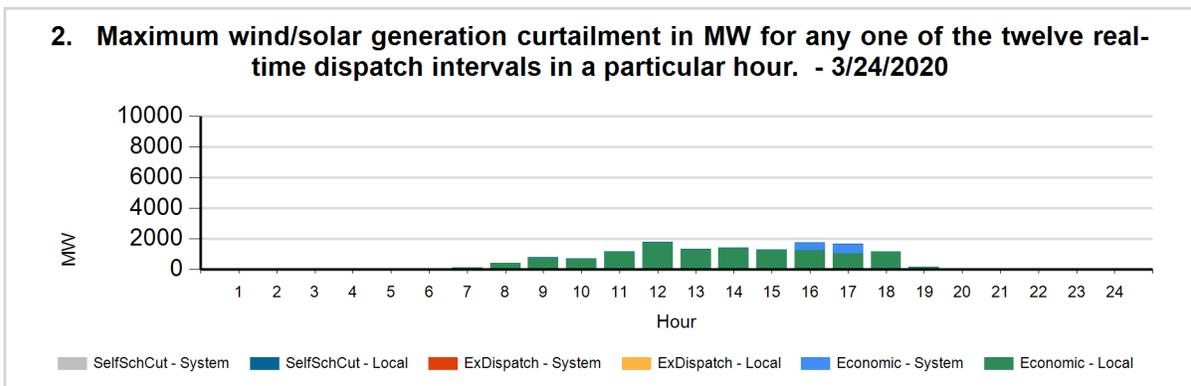
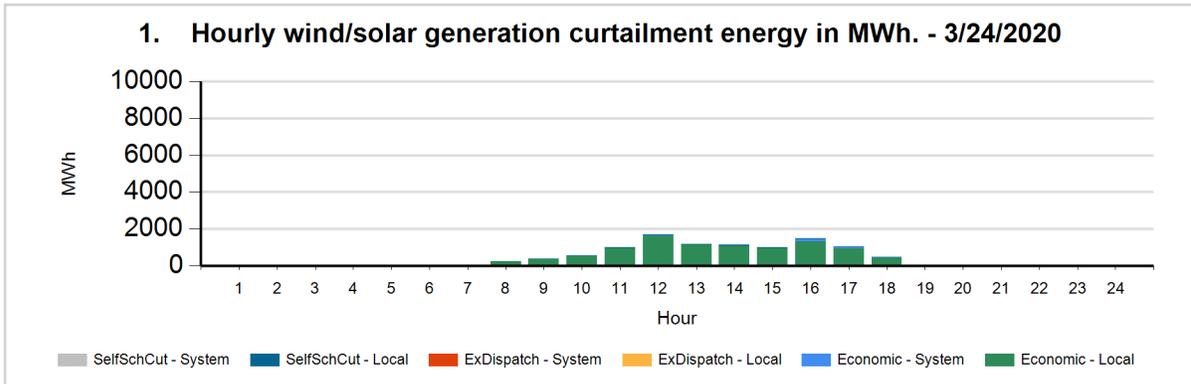
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

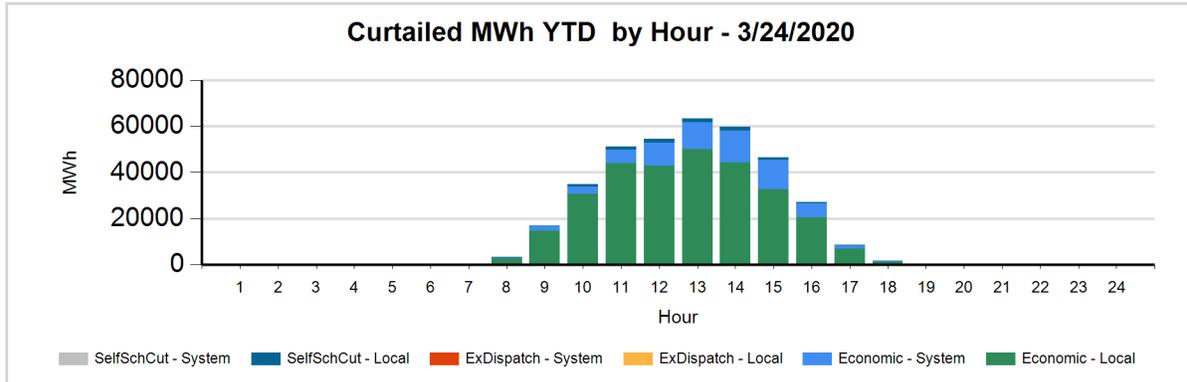
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

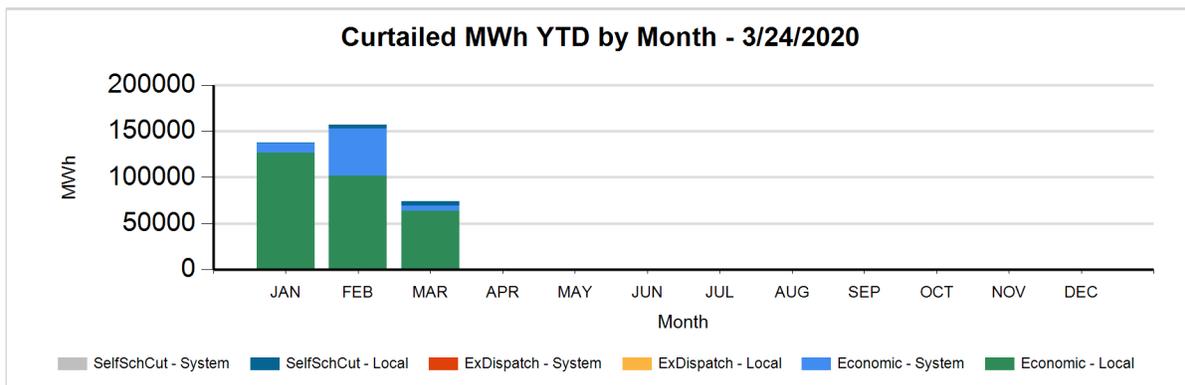
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/24/2020
LocalEconomic	291,978
LocalSelfSchCut	9,449
SystemEconomic	67,699
TOTAL	369,127

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/24	7	Economic	Local	SOLR	1	12
03/24	7	Economic	Local	WIND	20	112
03/24	8	Economic	Local	SOLR	196	390
03/24	8	Economic	Local	WIND	29	7
03/24	8	Economic	System	SOLR	0	
03/24	9	Economic	Local	SOLR	343	739
03/24	9	Economic	Local	WIND	18	35
03/24	9	Economic	System	SOLR	0	
03/24	9	SelfSchCut	Local	SOLR	22	31
03/24	10	Economic	Local	SOLR	512	628
03/24	10	Economic	Local	WIND	35	51
03/24	10	SelfSchCut	Local	SOLR	17	9
03/24	11	Economic	Local	SOLR	832	987
03/24	11	Economic	Local	WIND	125	127
03/24	11	SelfSchCut	Local	SOLR	32	50
03/24	12	Economic	Local	SOLR	1516	1577
03/24	12	Economic	Local	WIND	122	157
03/24	12	Economic	System	SOLR	4	
03/24	12	SelfSchCut	Local	SOLR	49	49
03/24	13	Economic	Local	SOLR	1052	1202
03/24	13	Economic	Local	WIND	79	86
03/24	13	Economic	System	SOLR	0	
03/24	13	SelfSchCut	Local	SOLR	43	43
03/24	14	Economic	Local	SOLR	978	1259
03/24	14	Economic	Local	WIND	103	94
03/24	14	SelfSchCut	Local	SOLR	43	42
03/24	15	Economic	Local	SOLR	878	1217
03/24	15	Economic	Local	WIND	83	82
03/24	15	SelfSchCut	Local	SOLR	26	3
03/24	16	Economic	Local	SOLR	1223	1147
03/24	16	Economic	Local	WIND	97	104

03/24	16	Economic	System	SOLR	159	457
03/24	16	Economic	System	WIND	11	28
03/24	16	SelfSchCut	Local	SOLR	5	4
03/24	17	Economic	Local	SOLR	852	970
03/24	17	Economic	Local	WIND	74	64
03/24	17	Economic	System	SOLR	99	587
03/24	17	Economic	System	WIND	3	12
03/24	17	SelfSchCut	Local	SOLR	14	42
03/24	18	Economic	Local	SOLR	372	886
03/24	18	Economic	Local	WIND	107	284
03/24	18	Economic	System	SOLR	6	
03/24	19	Economic	Local	SOLR	26	162

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.