

Wind and Solar Curtailment March 27, 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.

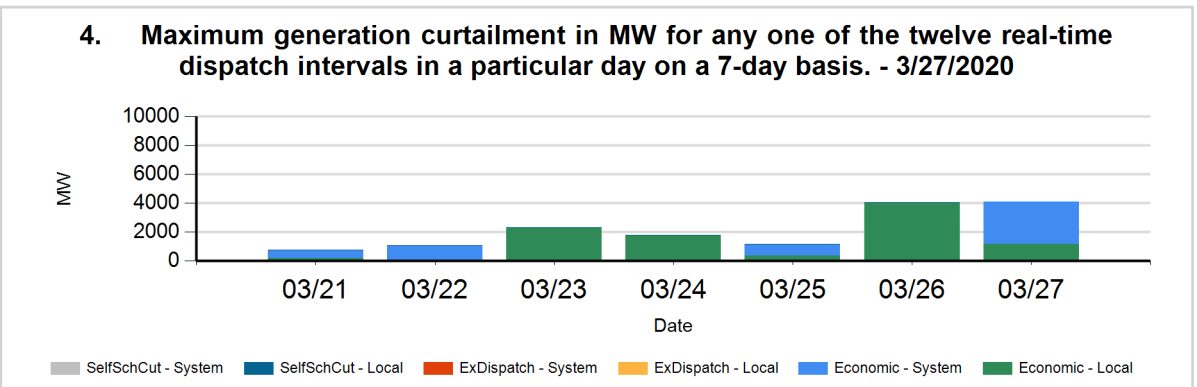
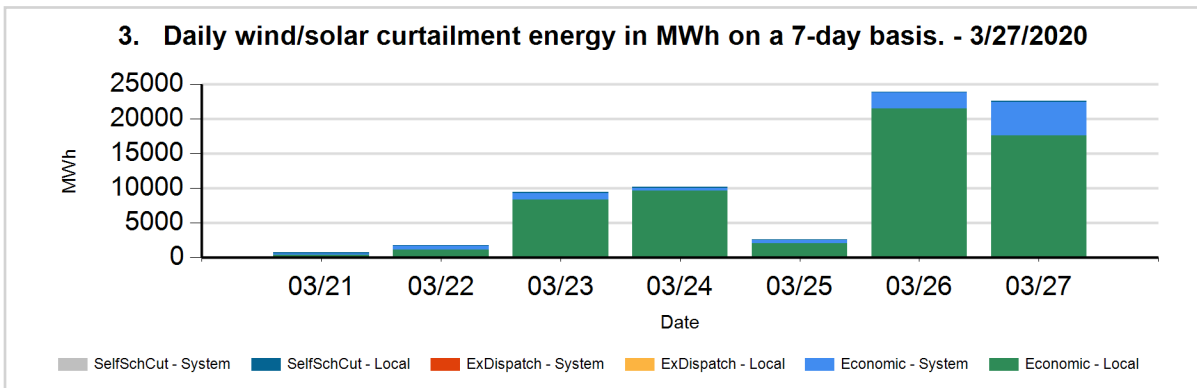
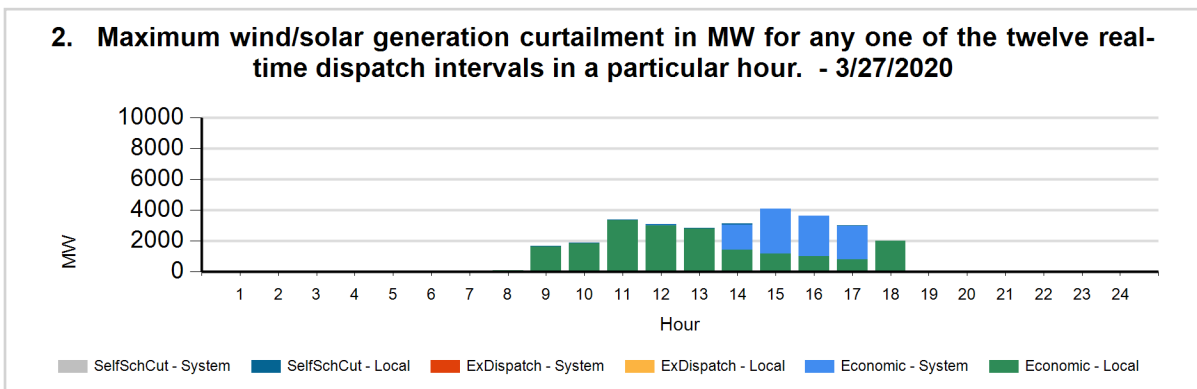
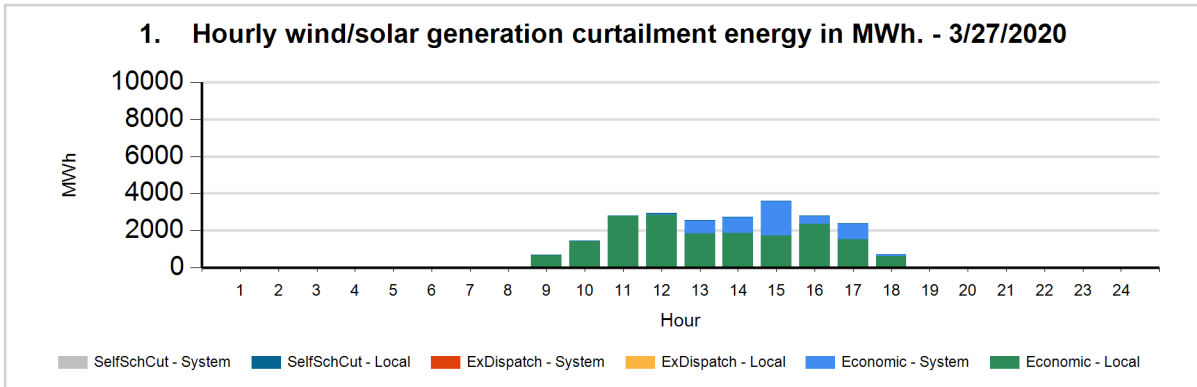
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

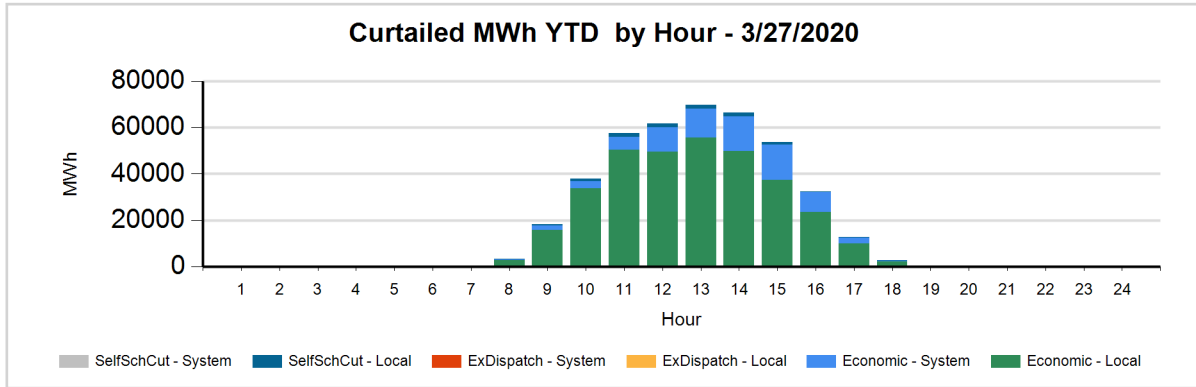
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

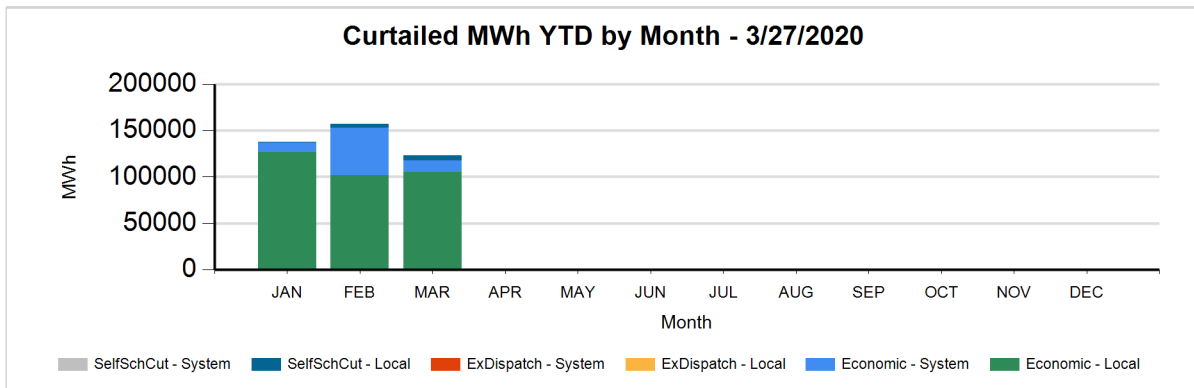
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/27/2020
LocalEconomic	333,181
LocalSelfSchCut	9,976
SystemEconomic	75,129
TOTAL	418,287

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/27	8	Economic	Local	SOLR	5	62
03/27	9	Economic	Local	SOLR	593	1622
03/27	9	Economic	Local	WIND	58	8
03/27	9	Economic	System	SOLR	20	
03/27	9	Economic	System	WIND	2	
03/27	9	SelfSchCut	Local	SOLR	17	33
03/27	10	Economic	Local	SOLR	1280	1715
03/27	10	Economic	Local	WIND	144	121
03/27	10	SelfSchCut	Local	SOLR	12	20
03/27	11	Economic	Local	SOLR	2629	3170
03/27	11	Economic	Local	WIND	128	178
03/27	11	SelfSchCut	Local	SOLR	29	48
03/27	12	Economic	Local	SOLR	2732	2894
03/27	12	Economic	Local	WIND	143	142
03/27	12	Economic	System	WIND	3	14
03/27	12	SelfSchCut	Local	SOLR	49	49
03/27	13	Economic	Local	SOLR	1677	2635
03/27	13	Economic	Local	WIND	152	190
03/27	13	Economic	System	SOLR	636	
03/27	13	Economic	System	WIND	59	
03/27	13	SelfSchCut	Local	SOLR	42	27
03/27	14	Economic	Local	SOLR	1717	1310
03/27	14	Economic	Local	WIND	157	119
03/27	14	Economic	System	SOLR	766	1533
03/27	14	Economic	System	WIND	64	96
03/27	14	SelfSchCut	Local	SOLR	42	52
03/27	15	Economic	Local	SOLR	1561	999
03/27	15	Economic	Local	WIND	157	163
03/27	15	Economic	System	SOLR	1773	2835
03/27	15	Economic	System	WIND	65	85
03/27	15	SelfSchCut	Local	SOLR	32	

03/27	16	Economic	Local	SOLR	2191	932
03/27	16	Economic	Local	WIND	143	46
03/27	16	Economic	System	SOLR	392	2320
03/27	16	Economic	System	WIND	58	330
03/27	16	SelfSchCut	Local	SOLR	2	
03/27	17	Economic	Local	SOLR	1462	797
03/27	17	Economic	Local	WIND	60	11
03/27	17	Economic	System	SOLR	795	1967
03/27	17	Economic	System	WIND	53	179
03/27	17	SelfSchCut	Local	SOLR	14	45
03/27	18	Economic	Local	SOLR	611	1927
03/27	18	Economic	Local	WIND	14	54
03/27	18	Economic	System	SOLR	83	
03/27	18	Economic	System	WIND	5	

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.