

Wind and Solar Curtailment March 15, 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.

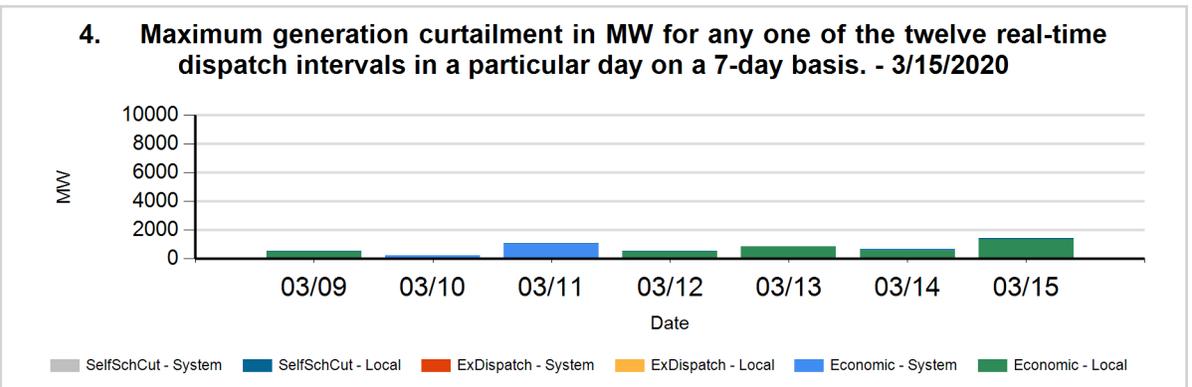
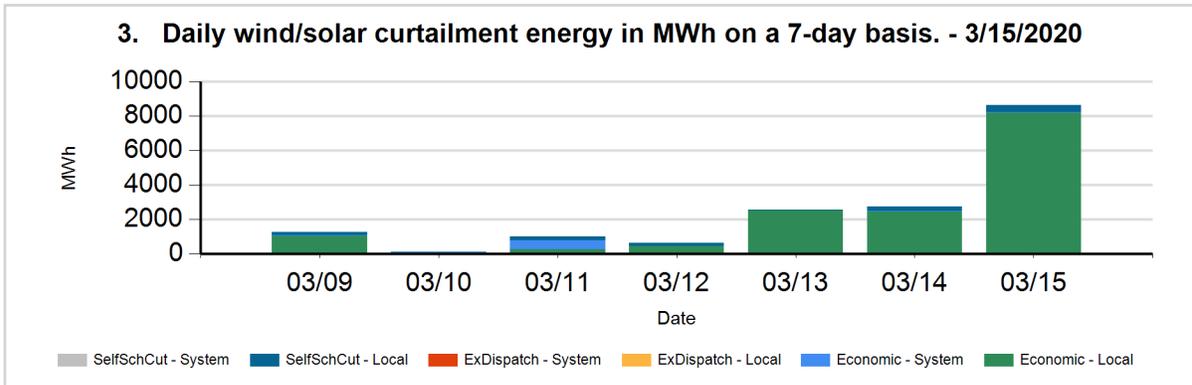
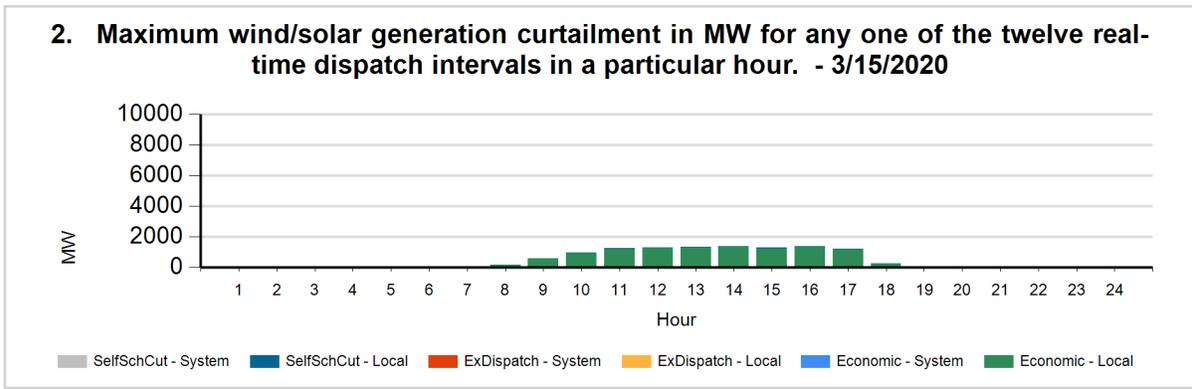
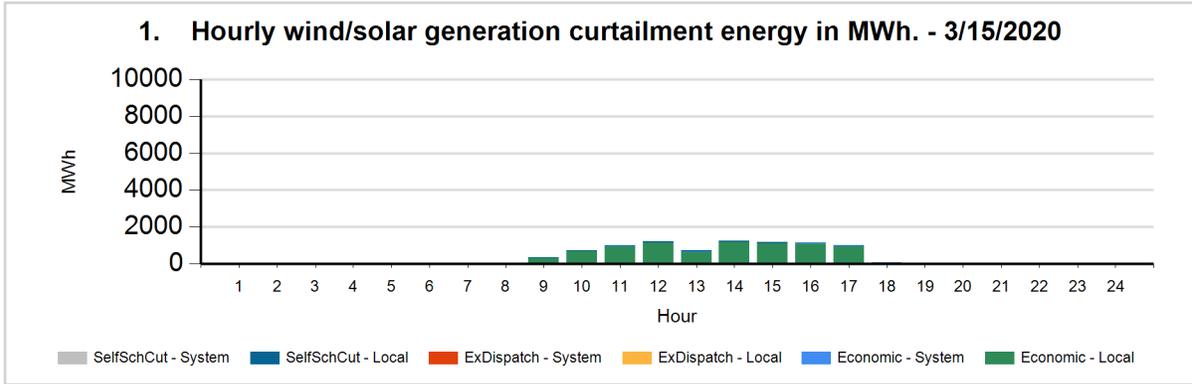
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

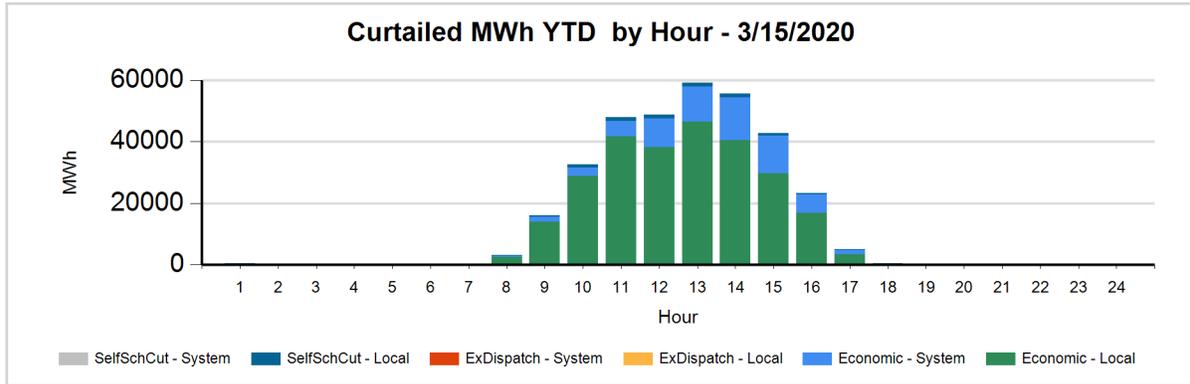
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

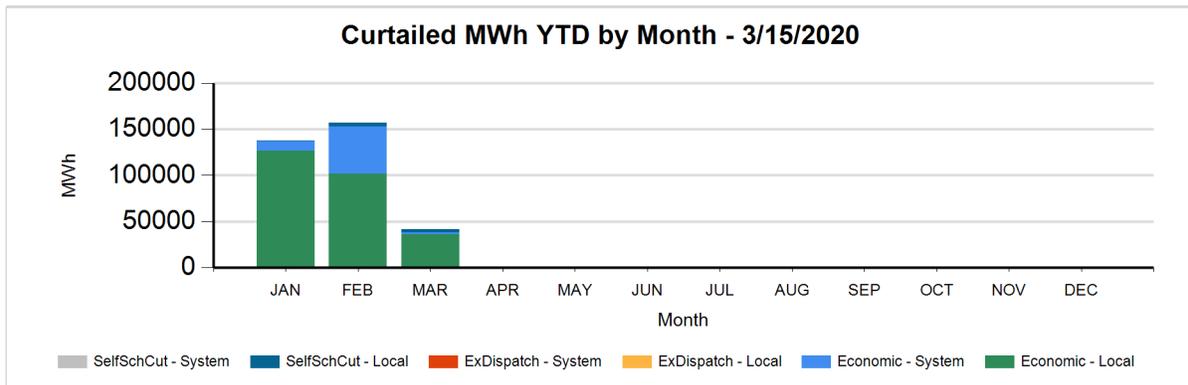
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/15/2020
LocalEconomic	264,123
LocalSelfSchCut	7,888
SystemEconomic	64,267
TOTAL	336,278

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/15	8	Economic	Local	SOLR	33	148
03/15	8	Economic	Local	WIND	13	8
03/15	9	Economic	Local	SOLR	316	546
03/15	9	Economic	Local	WIND	25	23
03/15	9	SelfSchCut	Local	SOLR	14	
03/15	10	Economic	Local	SOLR	563	866
03/15	10	Economic	Local	WIND	113	42
03/15	10	SelfSchCut	Local	SOLR	35	56
03/15	11	Economic	Local	SOLR	763	994
03/15	11	Economic	Local	WIND	176	172
03/15	11	Economic	System	SOLR	14	
03/15	11	SelfSchCut	Local	SOLR	46	67
03/15	12	Economic	Local	SOLR	985	1078
03/15	12	Economic	Local	WIND	160	163
03/15	12	SelfSchCut	Local	SOLR	65	66
03/15	13	Economic	Local	SOLR	557	1084
03/15	13	Economic	Local	WIND	85	192
03/15	13	Economic	System	SOLR	17	
03/15	13	SelfSchCut	Local	SOLR	71	73
03/15	14	Economic	Local	SOLR	1001	1138
03/15	14	Economic	Local	WIND	174	183
03/15	14	SelfSchCut	Local	SOLR	69	71
03/15	15	Economic	Local	SOLR	1017	1081
03/15	15	Economic	Local	WIND	98	143
03/15	15	SelfSchCut	Local	SOLR	56	75
03/15	16	Economic	Local	SOLR	989	1131
03/15	16	Economic	Local	WIND	110	223
03/15	16	Economic	System	SOLR	4	
03/15	16	SelfSchCut	Local	SOLR	22	14
03/15	17	Economic	Local	SOLR	757	996
03/15	17	Economic	Local	WIND	206	208

03/15	17	Economic	System	SOLR	5	
03/15	17	SelfSchCut	Local	SOLR	19	14
03/15	18	Economic	Local	SOLR	38	183
03/15	18	Economic	Local	WIND	8	33
03/15	18	SelfSchCut	Local	SOLR	6	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.