

Wind and Solar Curtailment March 20, 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.

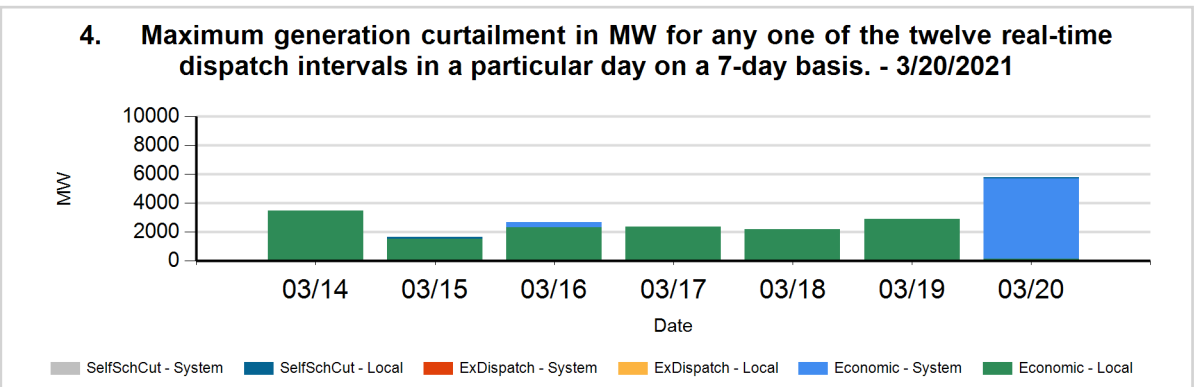
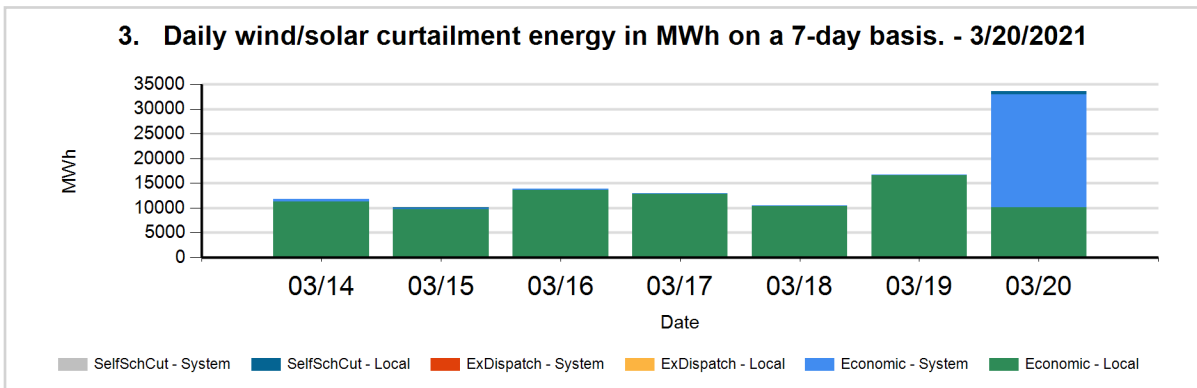
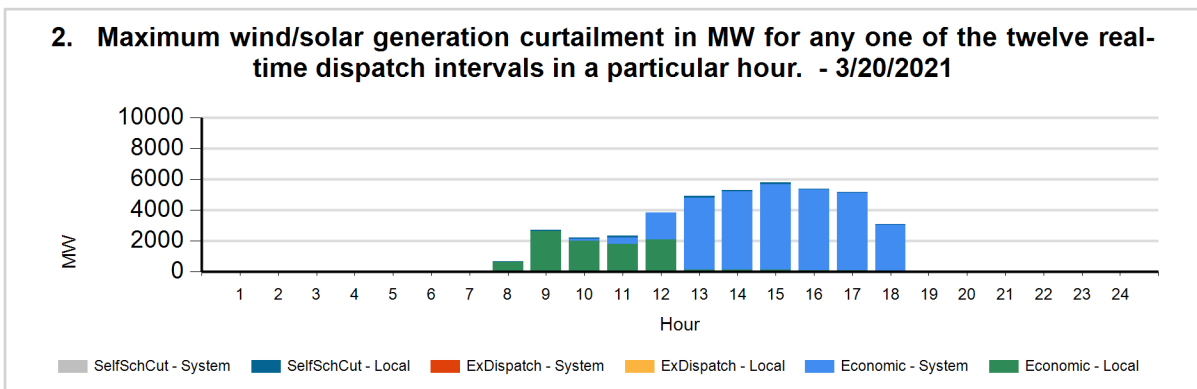
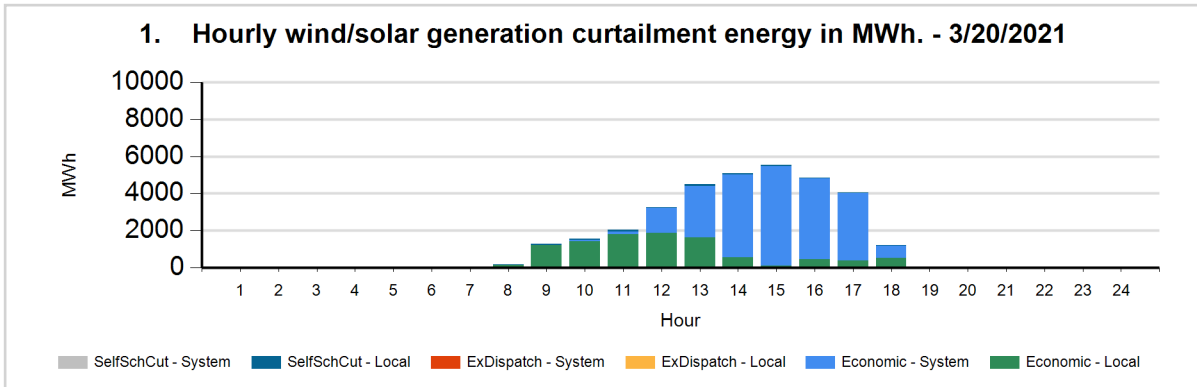
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

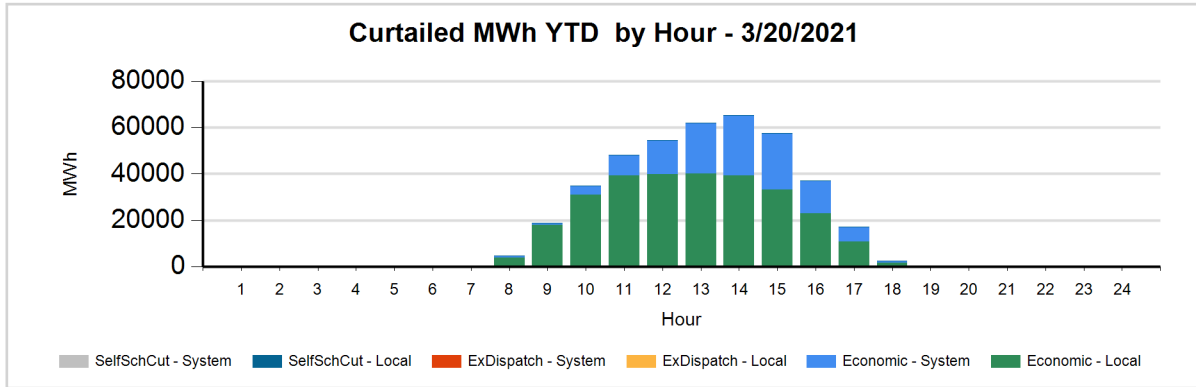
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

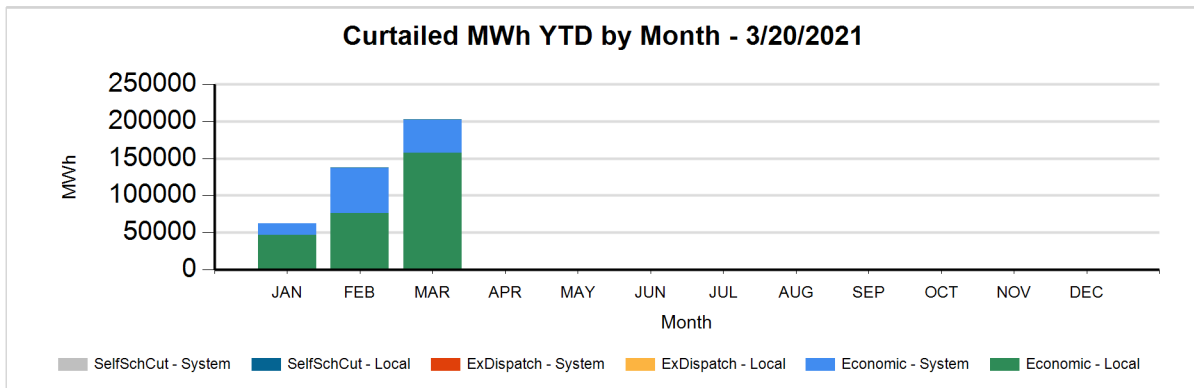
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/20/2021
LocalEconomic	280,250
LocalSelfSchCut	1,383
SystemEconomic	121,144
TOTAL	402,777

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/20	8	Economic	Local	SOLR	126	616
03/20	8	Economic	Local	WIND	8	20
03/20	8	SelfSchCut	Local	WIND	28	45
03/20	9	Economic	Local	SOLR	1182	2475
03/20	9	Economic	Local	WIND	35	153
03/20	9	SelfSchCut	Local	WIND	76	89
03/20	10	Economic	Local	SOLR	1401	1950
03/20	10	Economic	Local	WIND	22	29
03/20	10	Economic	System	SOLR	50	127
03/20	10	Economic	System	WIND	3	22
03/20	10	SelfSchCut	Local	SOLR	2	10
03/20	10	SelfSchCut	Local	WIND	88	85
03/20	11	Economic	Local	SOLR	1761	1742
03/20	11	Economic	Local	WIND	34	41
03/20	11	Economic	System	SOLR	150	419
03/20	11	Economic	System	WIND	7	19
03/20	11	SelfSchCut	Local	SOLR	2	6
03/20	11	SelfSchCut	Local	WIND	86	88
03/20	12	Economic	Local	SOLR	1790	1940
03/20	12	Economic	Local	WIND	66	144
03/20	12	Economic	System	SOLR	1356	1741
03/20	12	Economic	System	WIND	17	24
03/20	12	SelfSchCut	Local	SOLR	1	
03/20	12	SelfSchCut	Local	WIND	32	
03/20	13	Economic	Local	SOLR	1575	115
03/20	13	Economic	Local	WIND	63	11
03/20	13	Economic	System	SOLR	2592	4313
03/20	13	Economic	System	WIND	152	366
03/20	13	SelfSchCut	Local	WIND	97	111
03/20	14	Economic	Local	SOLR	504	118
03/20	14	Economic	Local	WIND	45	12

03/20	14	Economic	System	SOLR	4110	4702
03/20	14	Economic	System	WIND	363	400
03/20	14	SelfSchCut	Local	WIND	57	84
03/20	15	Economic	Local	SOLR	93	120
03/20	15	Economic	Local	WIND	12	12
03/20	15	Economic	System	SOLR	4963	5147
03/20	15	Economic	System	WIND	394	397
03/20	15	SelfSchCut	Local	WIND	71	107
03/20	16	Economic	Local	SOLR	409	79
03/20	16	Economic	Local	WIND	39	12
03/20	16	Economic	System	SOLR	4049	4861
03/20	16	Economic	System	WIND	321	396
03/20	16	SelfSchCut	Local	SOLR	23	23
03/20	17	Economic	Local	SOLR	346	69
03/20	17	Economic	Local	WIND	22	12
03/20	17	Economic	System	SOLR	3411	4699
03/20	17	Economic	System	WIND	242	347
03/20	17	SelfSchCut	Local	SOLR	21	31
03/20	18	Economic	Local	SOLR	518	9
03/20	18	Economic	Local	WIND	6	
03/20	18	Economic	System	SOLR	671	3004
03/20	18	Economic	System	WIND	18	74
03/20	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.