

Wind and Solar Curtailment March 21, 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.

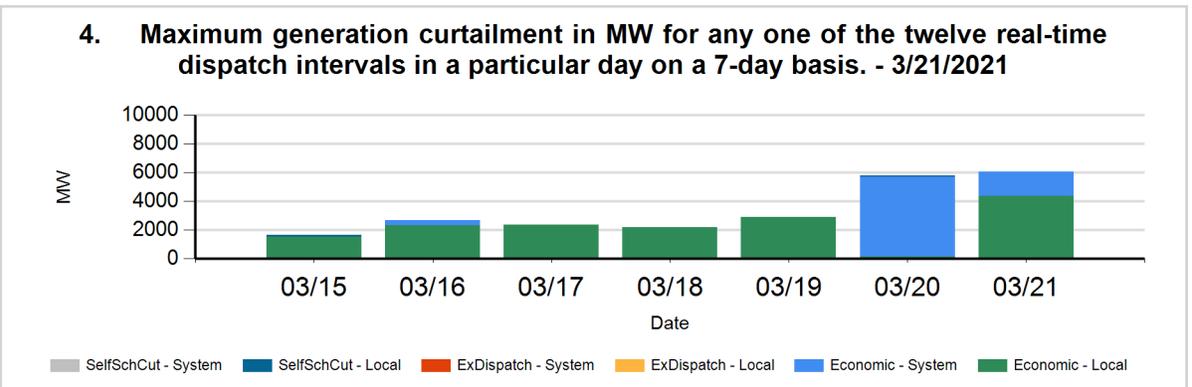
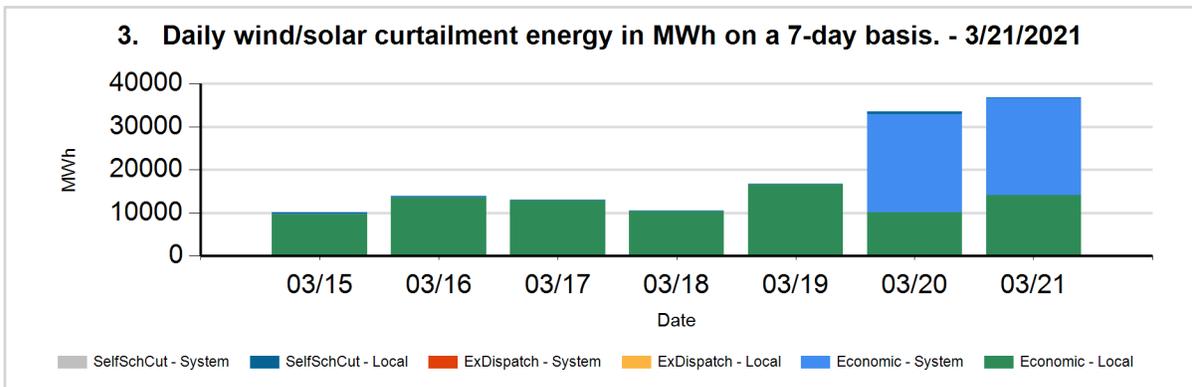
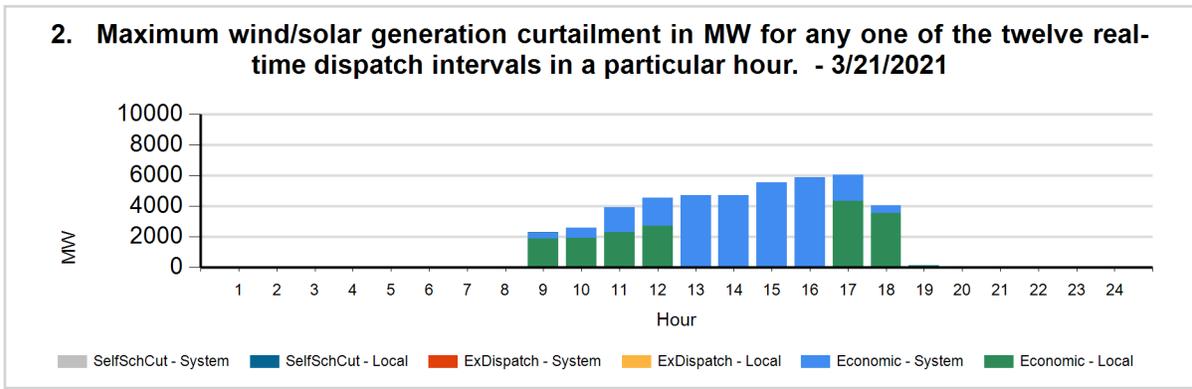
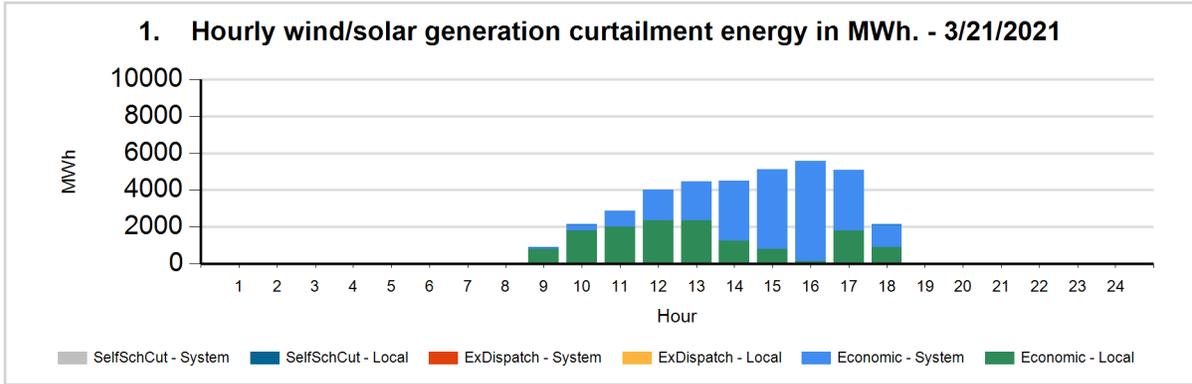
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

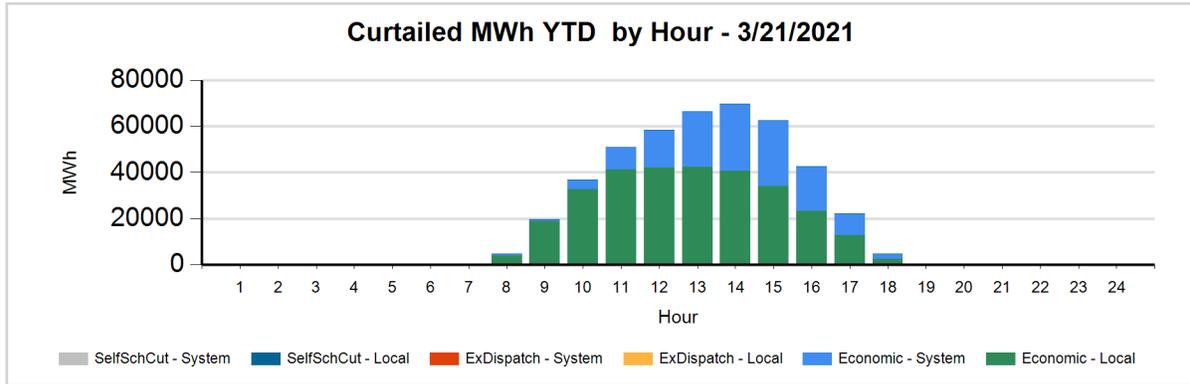
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

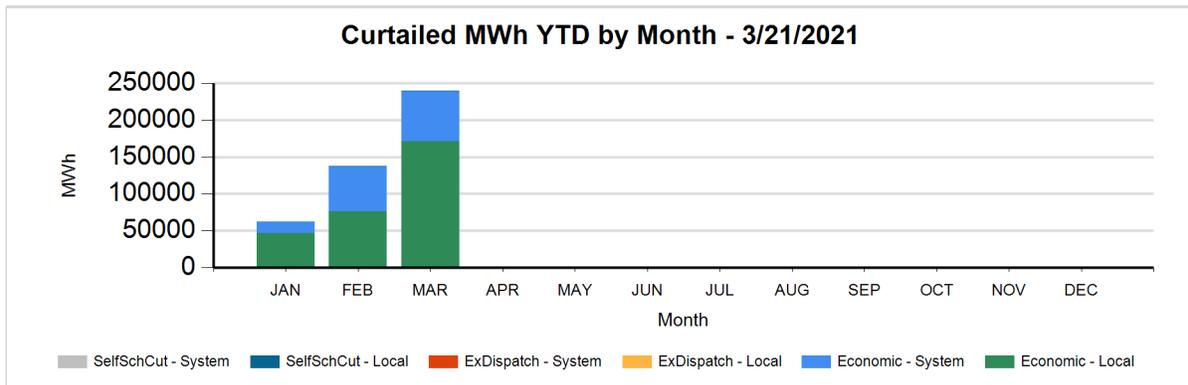
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/21/2021
LocalEconomic	294,365
LocalSelfSchCut	1,419
SystemEconomic	143,797
TOTAL	439,581

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/21	3	Economic	Local	WIND	3	34
03/21	5	Economic	Local	WIND	1	18
03/21	8	Economic	Local	SOLR	10	58
03/21	8	Economic	System	SOLR	1	
03/21	9	Economic	Local	SOLR	758	1848
03/21	9	Economic	Local	WIND	19	28
03/21	9	Economic	System	SOLR	120	394
03/21	9	Economic	System	WIND	1	4
03/21	9	SelfSchCut	Local	SOLR	2	11
03/21	10	Economic	Local	SOLR	1776	1889
03/21	10	Economic	Local	WIND	24	19
03/21	10	Economic	System	SOLR	343	657
03/21	10	Economic	System	WIND	6	7
03/21	10	SelfSchCut	Local	SOLR	3	
03/21	11	Economic	Local	SOLR	1979	2298
03/21	11	Economic	Local	WIND	8	11
03/21	11	Economic	System	SOLR	869	1599
03/21	11	Economic	System	WIND	12	25
03/21	11	SelfSchCut	Local	SOLR	0	
03/21	12	Economic	Local	SOLR	2305	2600
03/21	12	Economic	Local	WIND	29	116
03/21	12	Economic	System	SOLR	1581	1588
03/21	12	Economic	System	WIND	87	227
03/21	13	Economic	Local	SOLR	2227	56
03/21	13	Economic	Local	WIND	118	
03/21	13	Economic	System	SOLR	1906	4308
03/21	13	Economic	System	WIND	204	351
03/21	14	Economic	Local	SOLR	1211	49
03/21	14	Economic	Local	WIND	19	
03/21	14	Economic	System	SOLR	2944	4286
03/21	14	Economic	System	WIND	306	379

03/21	15	Economic	Local	SOLR	775	40
03/21	15	Economic	Local	WIND	1	
03/21	15	Economic	System	SOLR	3880	5036
03/21	15	Economic	System	WIND	460	476
03/21	16	Economic	Local	SOLR	143	37
03/21	16	Economic	Local	WIND	1	
03/21	16	Economic	System	SOLR	4848	5236
03/21	16	Economic	System	WIND	589	615
03/21	17	Economic	Local	SOLR	1535	3699
03/21	17	Economic	Local	WIND	264	652
03/21	17	Economic	System	SOLR	2966	1640
03/21	17	Economic	System	WIND	306	39
03/21	18	Economic	Local	SOLR	764	2952
03/21	18	Economic	Local	WIND	125	584
03/21	18	Economic	System	SOLR	1120	510
03/21	18	Economic	System	WIND	103	19
03/21	18	SelfSchCut	Local	SOLR	2	
03/21	18	SelfSchCut	Local	WIND	26	
03/21	19	Economic	Local	SOLR	6	33
03/21	19	Economic	Local	WIND	8	71
03/21	19	SelfSchCut	Local	WIND	3	32
03/21	21	Economic	Local	WIND	4	12
03/21	22	Economic	Local	WIND	1	6

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.