

Wind and Solar Curtailment April 24, 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.

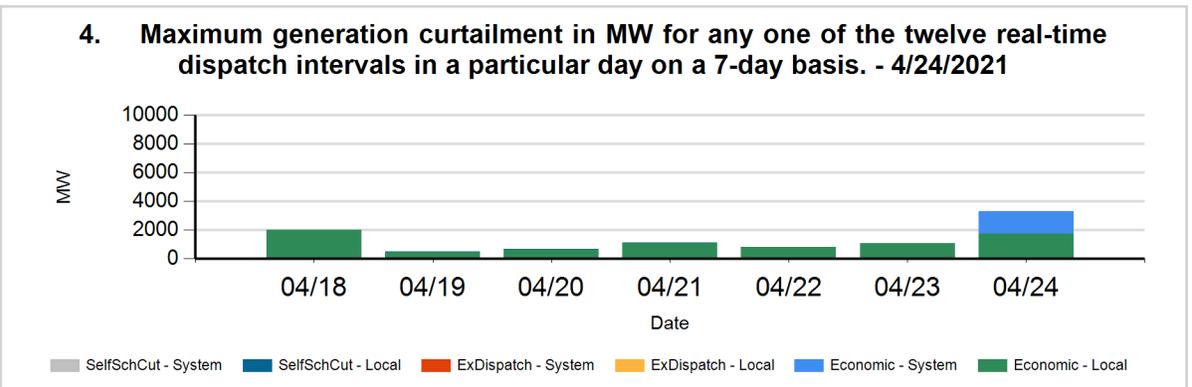
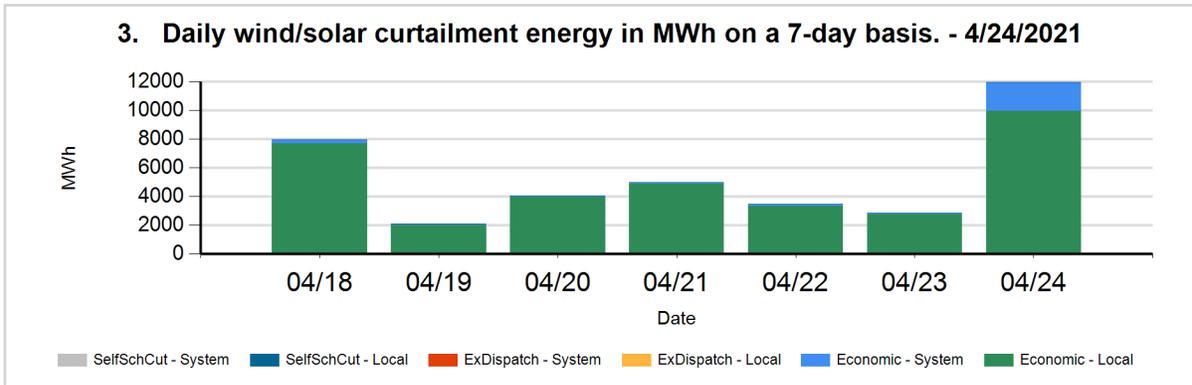
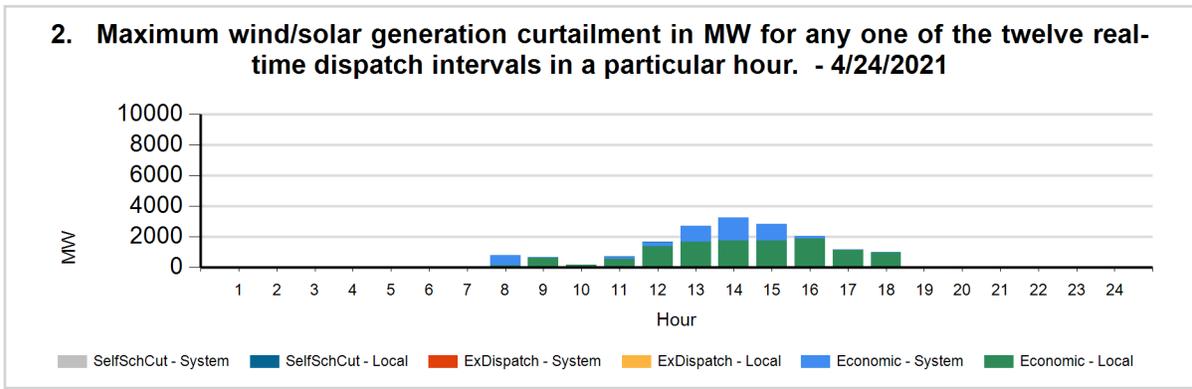
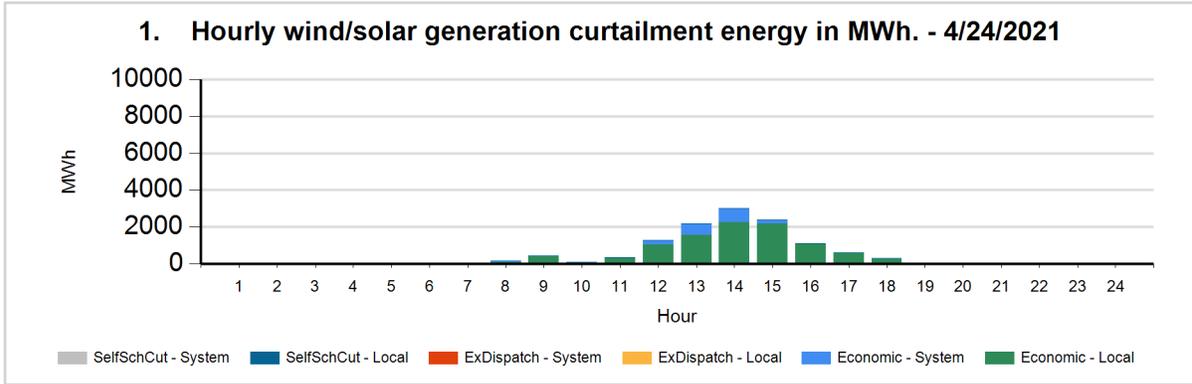
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

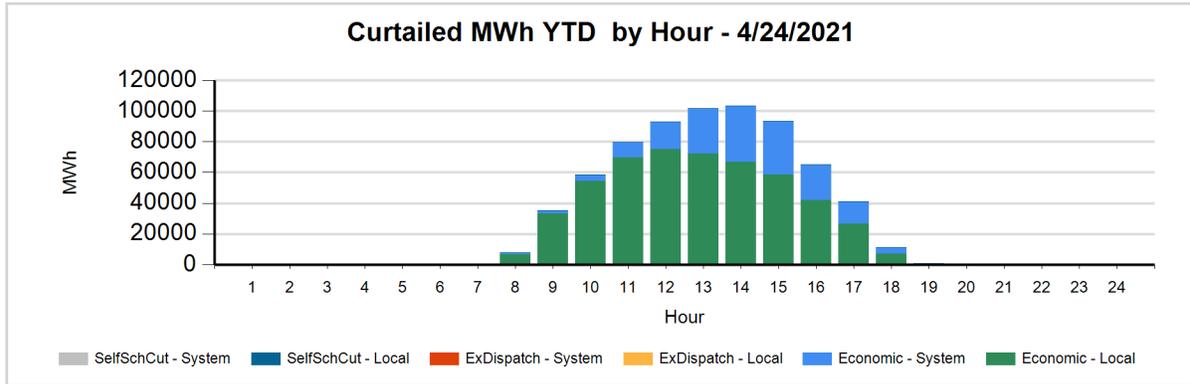
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

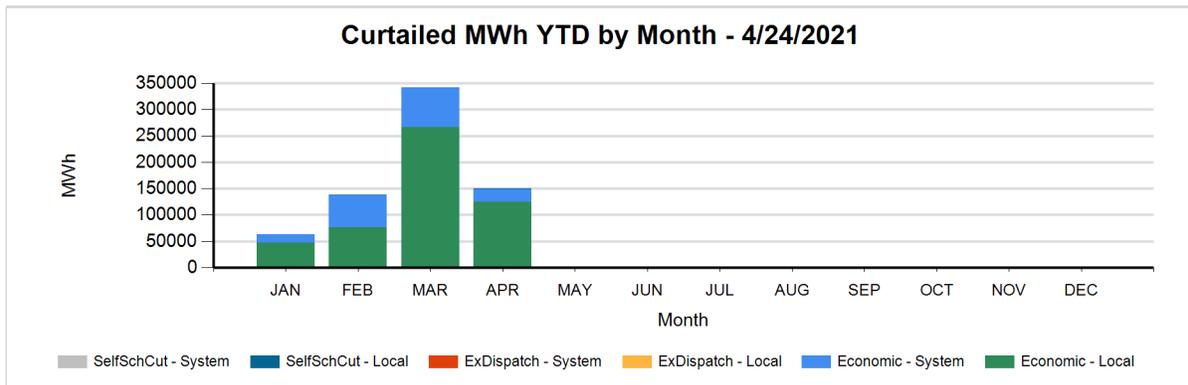
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/24/2021
LocalEconomic	514,007
LocalSelfSchCut	2,343
SystemEconomic	176,319
TOTAL	692,669

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/24	7	Economic	Local	SOLR	1	7
04/24	7	Economic	Local	WIND	3	21
04/24	8	Economic	Local	SOLR	102	105
04/24	8	Economic	Local	WIND	1	8
04/24	8	Economic	System	SOLR	77	645
04/24	8	Economic	System	WIND	2	20
04/24	9	Economic	Local	SOLR	433	649
04/24	9	Economic	Local	WIND	17	20
04/24	9	Economic	System	SOLR	2	1
04/24	10	Economic	Local	SOLR	79	96
04/24	10	Economic	Local	WIND	10	62
04/24	10	Economic	System	SOLR	2	
04/24	10	SelfSchCut	Local	SOLR	0	
04/24	11	Economic	Local	SOLR	277	549
04/24	11	Economic	Local	WIND	41	3
04/24	11	Economic	System	SOLR	29	145
04/24	11	Economic	System	WIND	6	
04/24	11	SelfSchCut	Local	SOLR	2	7
04/24	12	Economic	Local	SOLR	1016	1371
04/24	12	Economic	Local	WIND	13	
04/24	12	Economic	System	SOLR	166	192
04/24	12	Economic	System	WIND	62	83
04/24	12	SelfSchCut	Local	SOLR	5	9
04/24	13	Economic	Local	SOLR	1529	1676
04/24	13	Economic	Local	WIND	20	2
04/24	13	Economic	System	SOLR	510	864
04/24	13	Economic	System	WIND	109	146
04/24	13	SelfSchCut	Local	SOLR	3	
04/24	14	Economic	Local	SOLR	2180	1725
04/24	14	Economic	Local	WIND	82	3
04/24	14	Economic	System	SOLR	660	1373

04/24	14	Economic	System	WIND	85	158
04/24	14	SelfSchCut	Local	SOLR	3	
04/24	15	Economic	Local	SOLR	2056	1744
04/24	15	Economic	Local	WIND	107	4
04/24	15	Economic	System	SOLR	181	953
04/24	15	Economic	System	WIND	23	141
04/24	15	SelfSchCut	Local	SOLR	2	
04/24	16	Economic	Local	SOLR	1003	1739
04/24	16	Economic	Local	WIND	49	125
04/24	16	Economic	System	SOLR	30	138
04/24	16	Economic	System	WIND	6	21
04/24	16	SelfSchCut	Local	SOLR	2	
04/24	17	Economic	Local	SOLR	550	1161
04/24	17	Economic	Local	WIND	43	8
04/24	17	Economic	System	SOLR	25	2
04/24	17	Economic	System	WIND	6	
04/24	18	Economic	Local	SOLR	290	809
04/24	18	Economic	Local	WIND	24	137
04/24	18	Economic	System	SOLR	6	48
04/24	18	Economic	System	WIND	2	22
04/24	19	Economic	Local	SOLR	12	27
04/24	20	Economic	Local	SOLR	0	2

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.