

## Wind and Solar Curtailment April 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 why<sup>1</sup>. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation<sup>2</sup>.

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion<sup>3</sup>.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply<sup>4</sup>.
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.

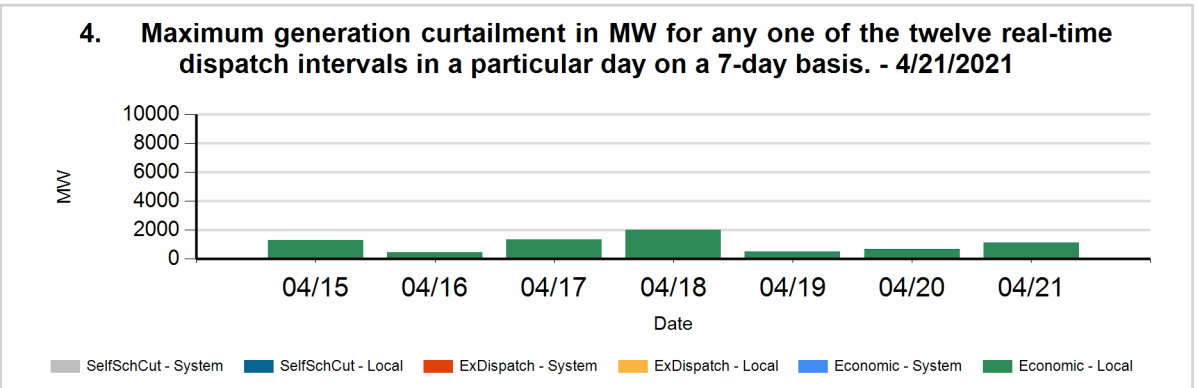
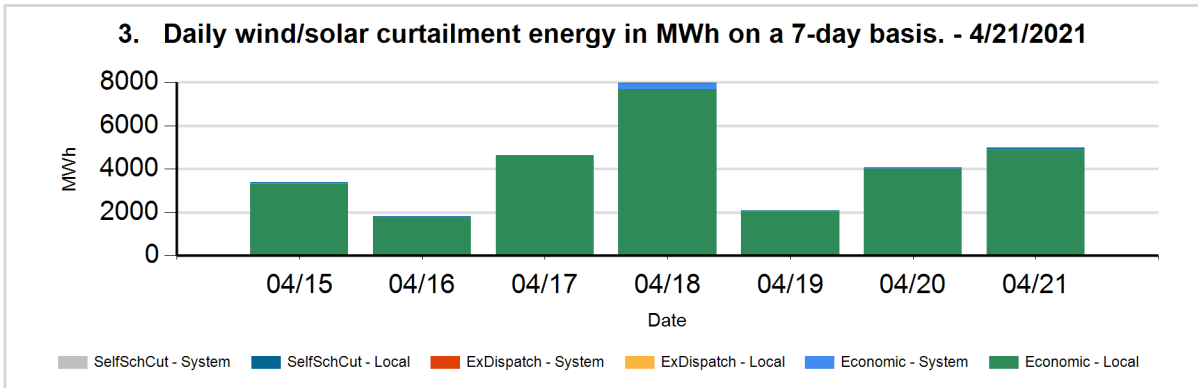
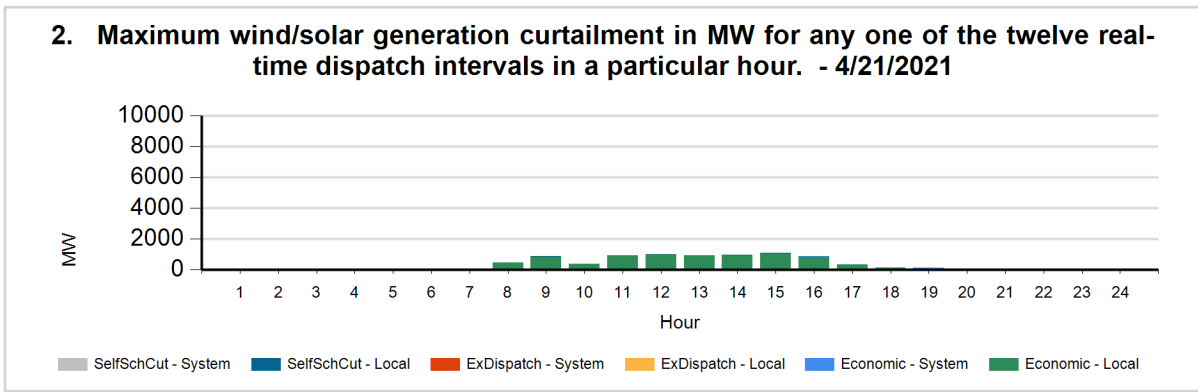
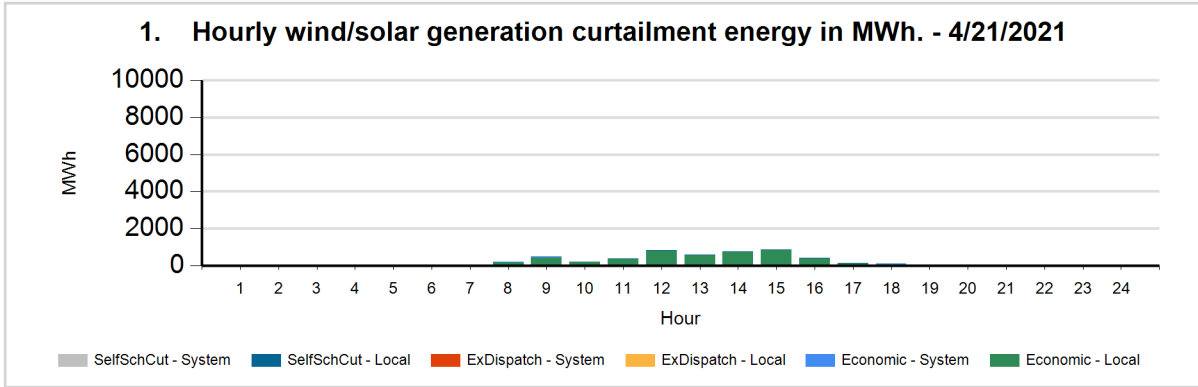
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

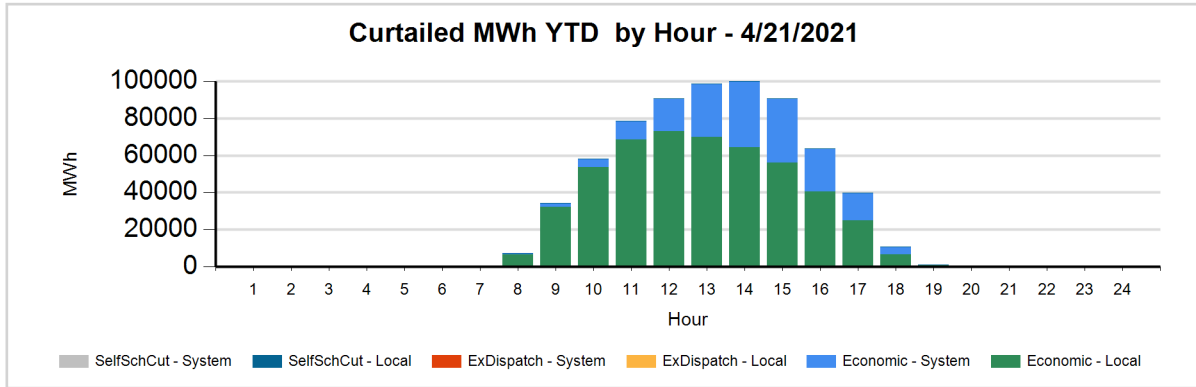
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<sup>4</sup>For more information on oversupply conditions, please see: [https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf)

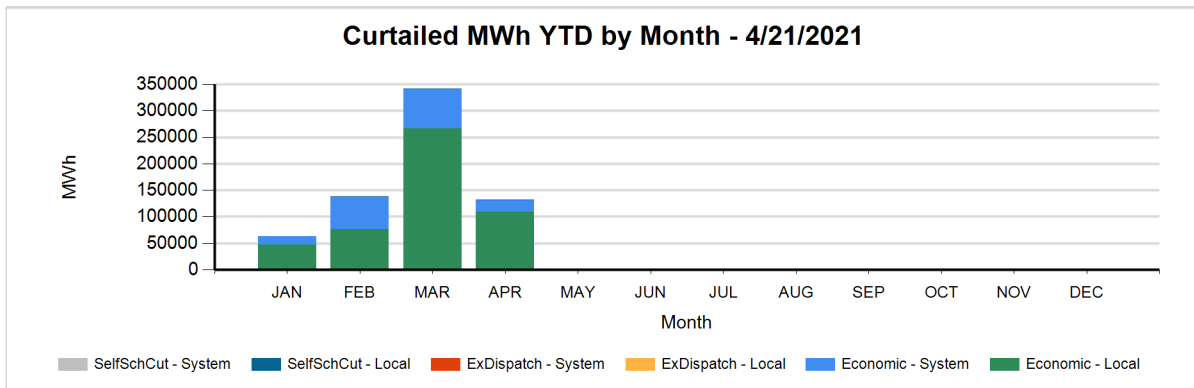
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/21/2021
LocalEconomic	497,979
LocalSelfSchCut	2,271
SystemEconomic	174,154
TOTAL	674,404

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/21	7	Economic	Local	SOLR	1	
04/21	7	Economic	System	SOLR	3	24
04/21	8	Economic	Local	SOLR	57	216
04/21	8	Economic	Local	WIND	133	240
04/21	8	Economic	System	SOLR	2	
04/21	9	Economic	Local	SOLR	308	630
04/21	9	Economic	Local	WIND	153	238
04/21	9	Economic	System	SOLR	2	
04/21	9	SelfSchCut	Local	SOLR	7	2
04/21	10	Economic	Local	SOLR	169	285
04/21	10	Economic	Local	WIND	30	93
04/21	11	Economic	Local	SOLR	335	821
04/21	11	Economic	Local	WIND	46	87
04/21	11	Economic	System	SOLR	0	
04/21	11	SelfSchCut	Local	SOLR	1	5
04/21	12	Economic	Local	SOLR	731	927
04/21	12	Economic	Local	WIND	110	75
04/21	12	SelfSchCut	Local	SOLR	2	
04/21	13	Economic	Local	SOLR	516	814
04/21	13	Economic	Local	WIND	75	94
04/21	13	SelfSchCut	Local	SOLR	6	11
04/21	14	Economic	Local	SOLR	642	837
04/21	14	Economic	Local	WIND	109	115
04/21	14	Economic	System	SOLR	0	
04/21	14	SelfSchCut	Local	SOLR	16	17
04/21	15	Economic	Local	SOLR	601	823
04/21	15	Economic	Local	WIND	239	238
04/21	15	SelfSchCut	Local	SOLR	10	19
04/21	16	Economic	Local	SOLR	289	626
04/21	16	Economic	Local	WIND	132	238
04/21	16	Economic	System	SOLR	0	2

04/21	16	SelfSchCut	Local	SOLR	3	
04/21	17	Economic	Local	SOLR	121	199
04/21	17	Economic	Local	WIND	24	129
04/21	17	SelfSchCut	Local	SOLR	2	
04/21	18	Economic	Local	SOLR	74	99
04/21	18	Economic	System	SOLR	2	
04/21	18	Economic	System	WIND	6	
04/21	18	SelfSchCut	Local	SOLR	3	8
04/21	19	Economic	Local	SOLR	10	4
04/21	19	Economic	Local	WIND	2	
04/21	19	Economic	System	WIND	9	114

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](mailto:ShortTermForecasting@caiso.com).