

## Wind and Solar Curtailment May 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.

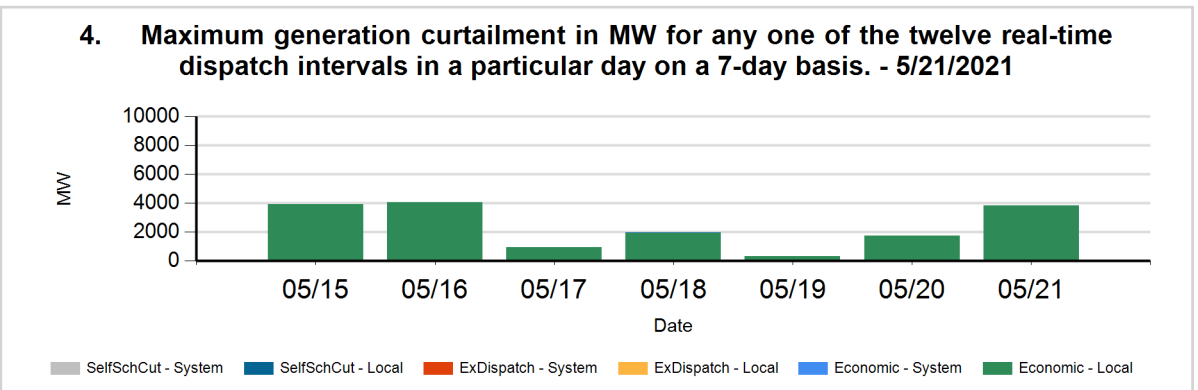
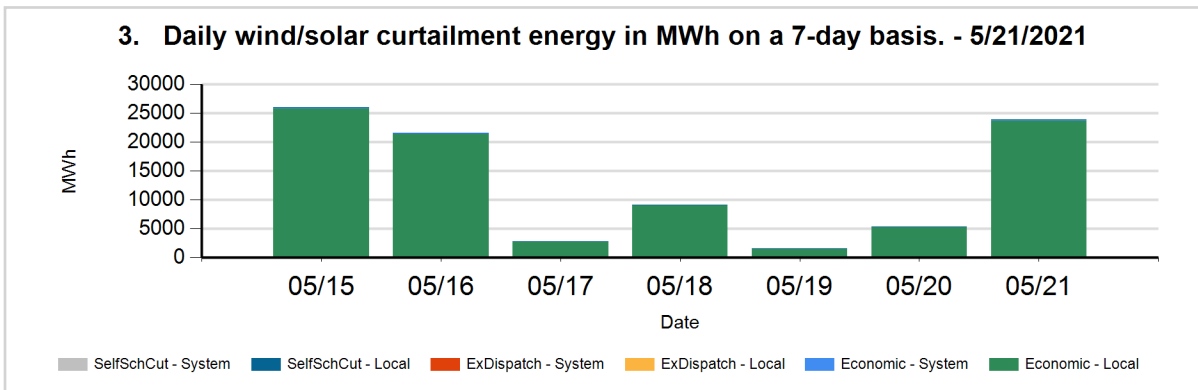
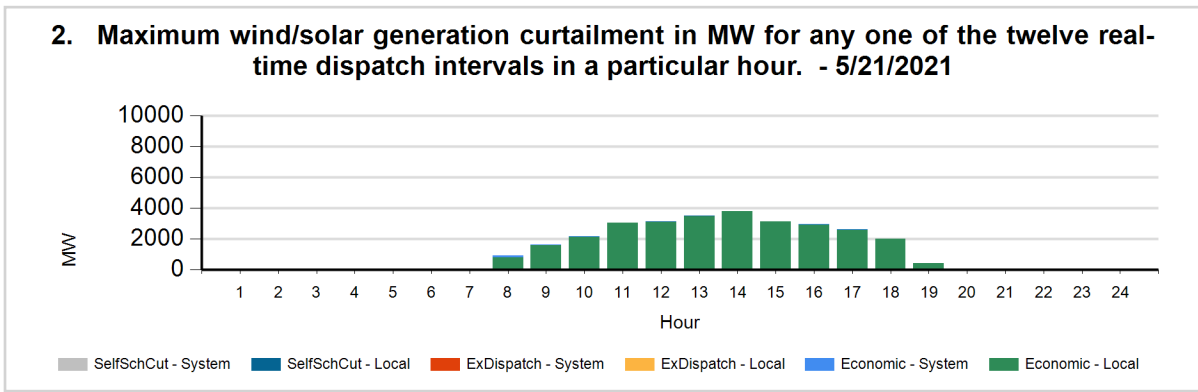
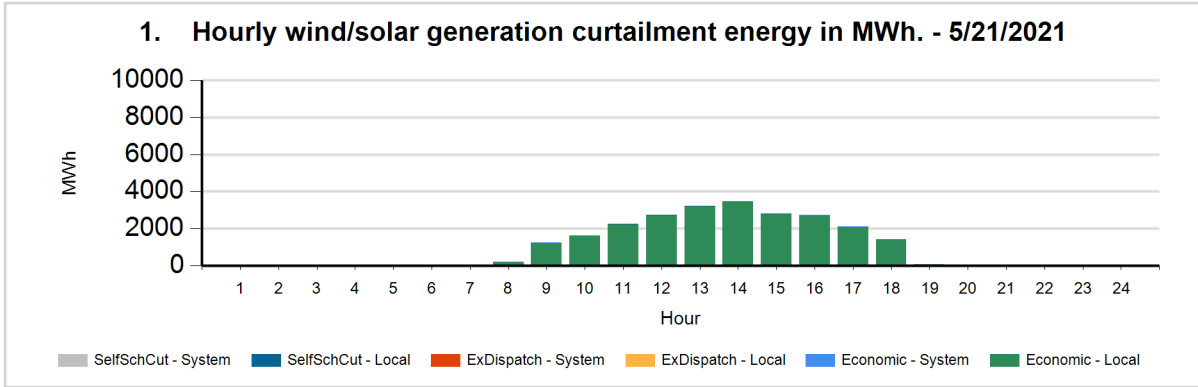
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

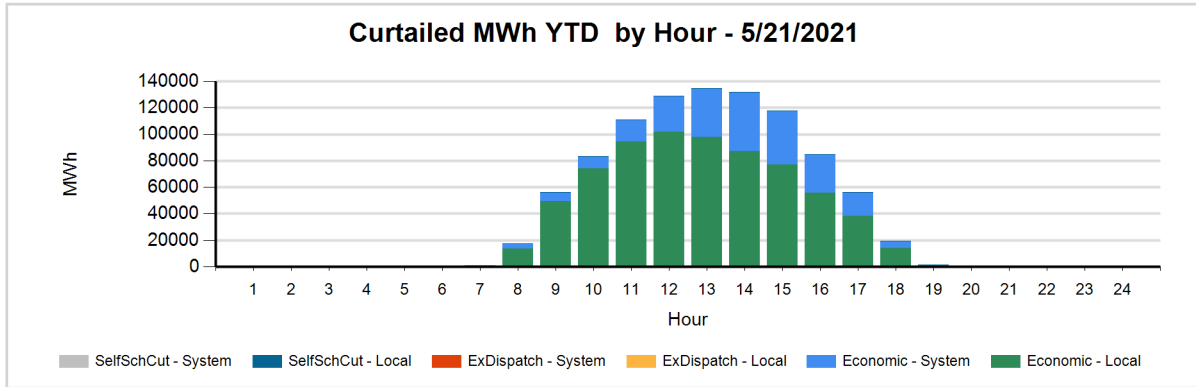
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

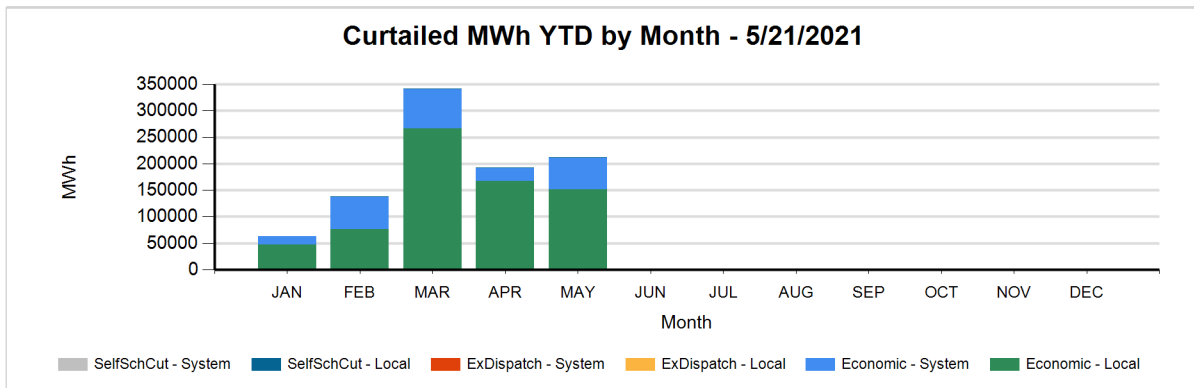
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/21/2021
LocalEconomic	706,617
LocalSelfSchCut	2,770
SystemEconomic	236,661
TOTAL	946,048

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/21	7	Economic	Local	SOLR	3	
05/21	7	Economic	System	SOLR	13	43
05/21	8	Economic	Local	SOLR	173	758
05/21	8	Economic	Local	WIND	2	20
05/21	8	Economic	System	SOLR	30	120
05/21	8	Economic	System	WIND	2	14
05/21	9	Economic	Local	SOLR	1096	1397
05/21	9	Economic	Local	WIND	115	196
05/21	9	Economic	System	SOLR	20	34
05/21	10	Economic	Local	SOLR	1485	1933
05/21	10	Economic	Local	WIND	143	194
05/21	10	Economic	System	SOLR	4	19
05/21	10	SelfSchCut	Local	SOLR	0	
05/21	11	Economic	Local	SOLR	2043	2839
05/21	11	Economic	Local	WIND	183	199
05/21	11	SelfSchCut	Local	SOLR	3	
05/21	12	Economic	Local	SOLR	2388	2729
05/21	12	Economic	Local	WIND	350	364
05/21	12	SelfSchCut	Local	SOLR	8	13
05/21	13	Economic	Local	SOLR	2907	3163
05/21	13	Economic	Local	WIND	306	331
05/21	13	SelfSchCut	Local	SOLR	6	6
05/21	14	Economic	Local	SOLR	3232	3638
05/21	14	Economic	Local	WIND	183	167
05/21	14	Economic	System	SOLR	33	
05/21	14	SelfSchCut	Local	SOLR	2	
05/21	15	Economic	Local	SOLR	2680	2973
05/21	15	Economic	Local	WIND	114	159
05/21	15	Economic	System	SOLR	8	
05/21	15	Economic	System	WIND	3	
05/21	15	SelfSchCut	Local	SOLR	2	

05/21	16	Economic	Local	SOLR	2620	2766
05/21	16	Economic	Local	WIND	64	169
05/21	16	Economic	System	SOLR	23	18
05/21	16	Economic	System	WIND	8	23
05/21	16	SelfSchCut	Local	SOLR	0	
05/21	17	Economic	Local	SOLR	1922	2217
05/21	17	Economic	Local	WIND	199	380
05/21	17	Economic	System	SOLR	1	7
05/21	18	Economic	Local	SOLR	1271	1631
05/21	18	Economic	Local	WIND	138	369
05/21	18	Economic	System	SOLR	0	
05/21	19	Economic	Local	SOLR	53	400
05/21	19	Economic	Local	WIND	2	18
05/21	22	Economic	Local	WIND	2	24
05/21	24	Economic	System	WIND	1	17

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).