

## Wind and Solar Curtailment May 23, 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.

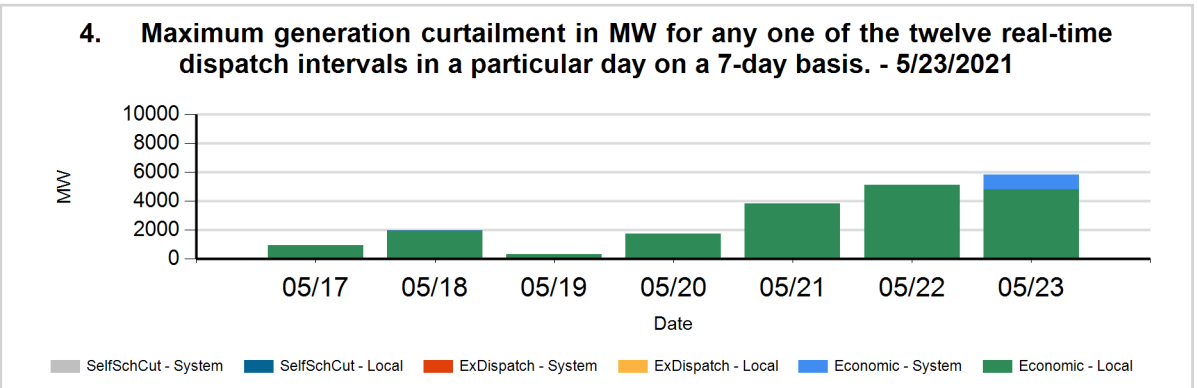
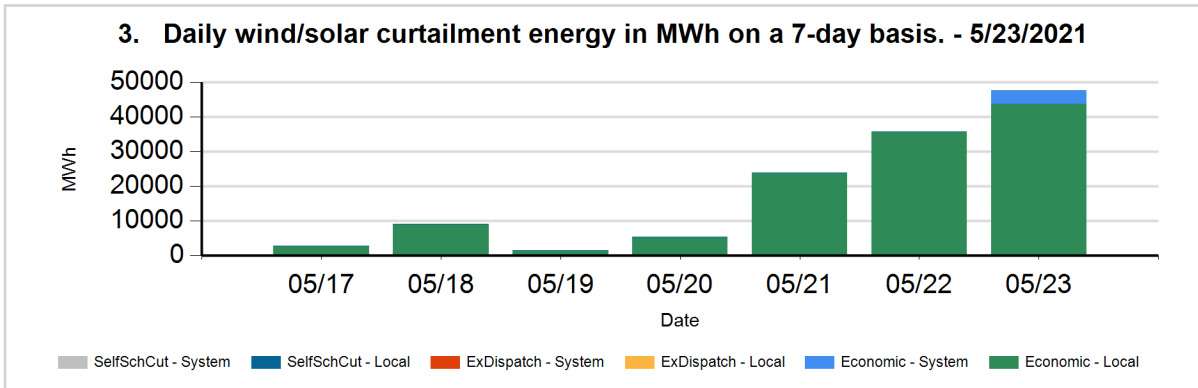
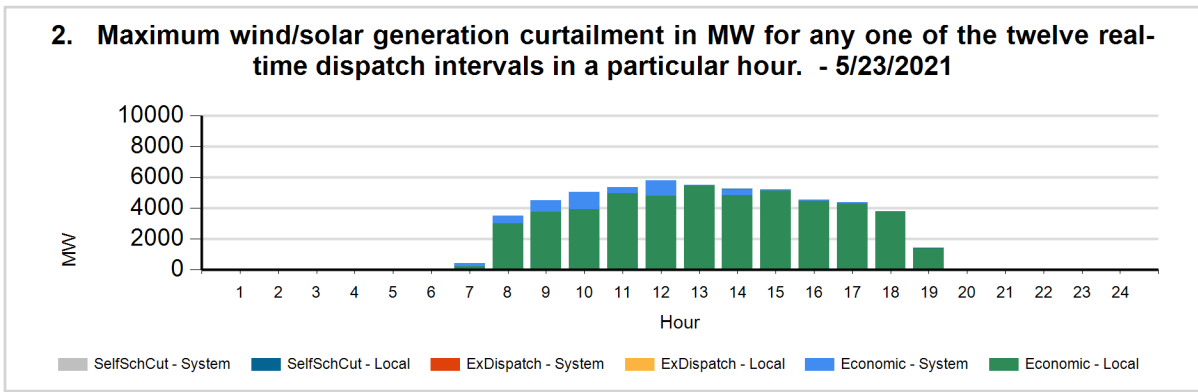
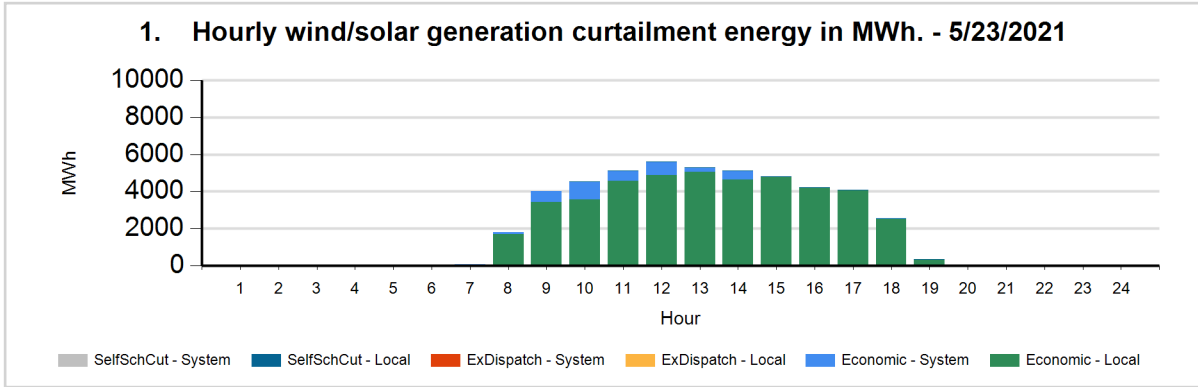
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

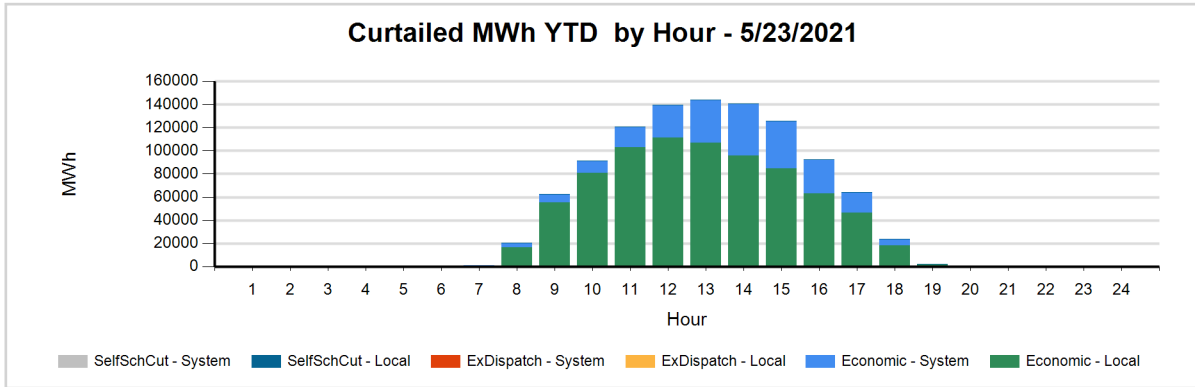
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

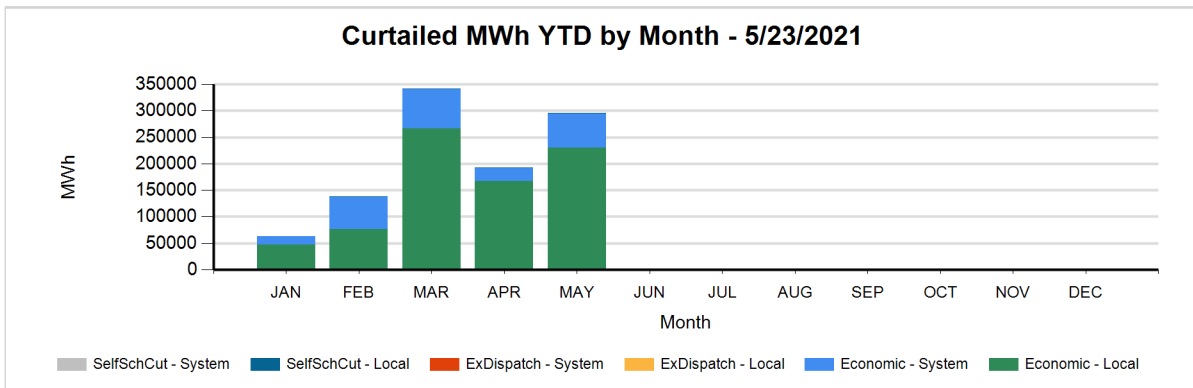
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 5/23/2021
LocalEconomic	786,018
LocalSelfSchCut	2,821
SystemEconomic	240,579
TOTAL	1,029,418

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/23	7	Economic	Local	SOLR	32	210
05/23	7	Economic	Local	WIND	0	3
05/23	7	Economic	System	SOLR	27	161
05/23	7	Economic	System	WIND	2	21
05/23	8	Economic	Local	SOLR	1646	2891
05/23	8	Economic	Local	WIND	39	126
05/23	8	Economic	System	SOLR	93	477
05/23	8	Economic	System	WIND	13	22
05/23	9	Economic	Local	SOLR	3307	3671
05/23	9	Economic	Local	WIND	107	88
05/23	9	Economic	System	SOLR	550	692
05/23	9	Economic	System	WIND	35	38
05/23	10	Economic	Local	SOLR	3515	3824
05/23	10	Economic	Local	WIND	58	77
05/23	10	Economic	System	SOLR	906	1033
05/23	10	Economic	System	WIND	48	100
05/23	10	SelfSchCut	Local	SOLR	1	
05/23	11	Economic	Local	SOLR	4440	4838
05/23	11	Economic	Local	WIND	113	119
05/23	11	Economic	System	SOLR	542	352
05/23	11	Economic	System	WIND	38	38
05/23	11	SelfSchCut	Local	SOLR	3	8
05/23	12	Economic	Local	SOLR	4706	4604
05/23	12	Economic	Local	WIND	183	176
05/23	12	Economic	System	SOLR	672	994
05/23	12	Economic	System	WIND	32	34
05/23	12	SelfSchCut	Local	SOLR	3	
05/23	13	Economic	Local	SOLR	4883	5293
05/23	13	Economic	Local	WIND	165	205
05/23	13	Economic	System	SOLR	228	20
05/23	13	Economic	System	WIND	18	

05/23	13	SelfSchCut	Local	SOLR	6	
05/23	14	Economic	Local	SOLR	4465	4641
05/23	14	Economic	Local	WIND	181	175
05/23	14	Economic	System	SOLR	468	423
05/23	14	SelfSchCut	Local	SOLR	5	11
05/23	15	Economic	Local	SOLR	4590	4939
05/23	15	Economic	Local	WIND	182	201
05/23	15	Economic	System	SOLR	34	56
05/23	15	SelfSchCut	Local	SOLR	5	
05/23	16	Economic	Local	SOLR	4086	4269
05/23	16	Economic	Local	WIND	105	202
05/23	16	Economic	System	SOLR	18	57
05/23	16	SelfSchCut	Local	SOLR	3	
05/23	17	Economic	Local	SOLR	3853	4028
05/23	17	Economic	Local	WIND	195	279
05/23	17	Economic	System	SOLR	36	67
05/23	17	Economic	System	WIND	5	17
05/23	17	SelfSchCut	Local	SOLR	1	
05/23	18	Economic	Local	SOLR	2463	3508
05/23	18	Economic	Local	WIND	84	241
05/23	18	Economic	System	SOLR	12	29
05/23	19	Economic	Local	SOLR	329	1381
05/23	19	Economic	Local	WIND	2	5
05/23	19	SelfSchCut	Local	SOLR	5	12
05/23	24	Economic	Local	WIND	1	15
05/23	24	Economic	System	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](mailto:ShortTermForecasting@caiso.com).



California ISO