

## Wind and Solar Curtailment March 20, 2022

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.

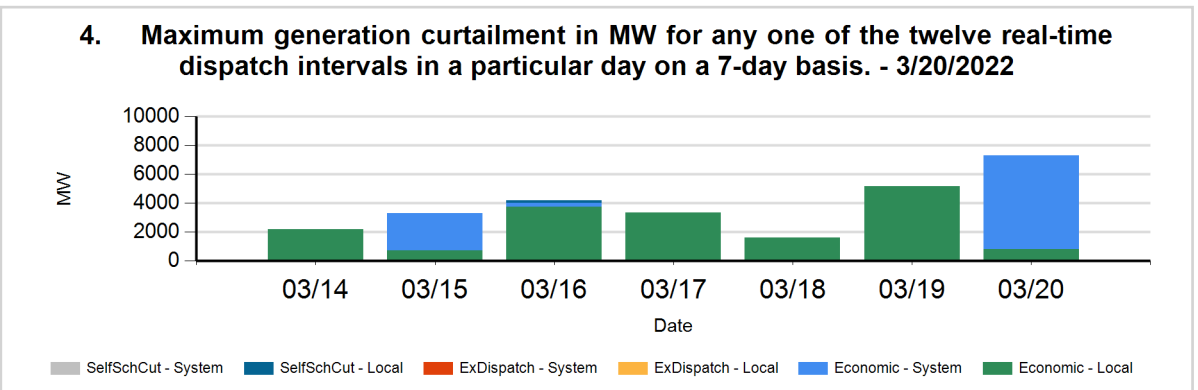
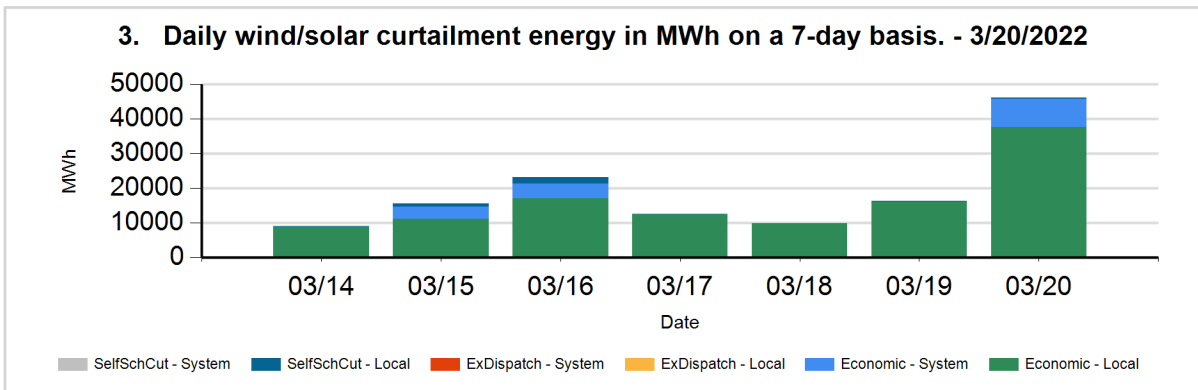
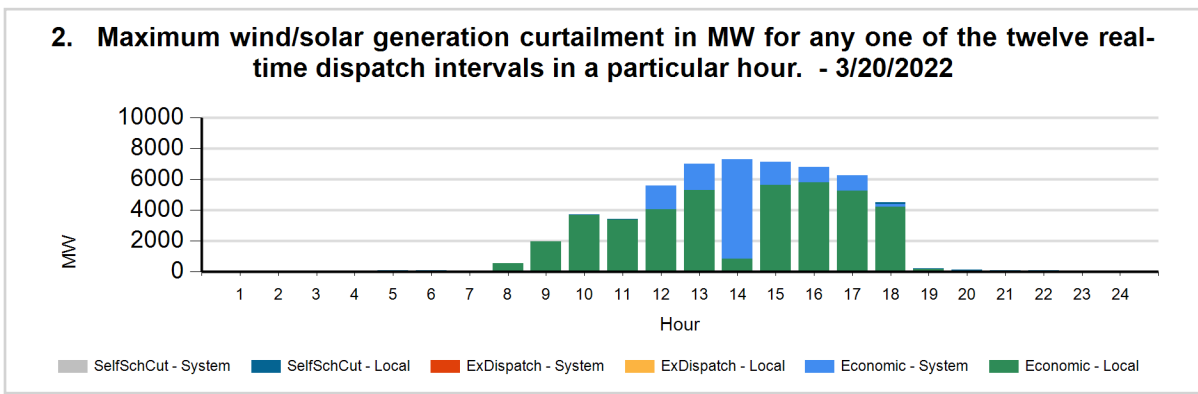
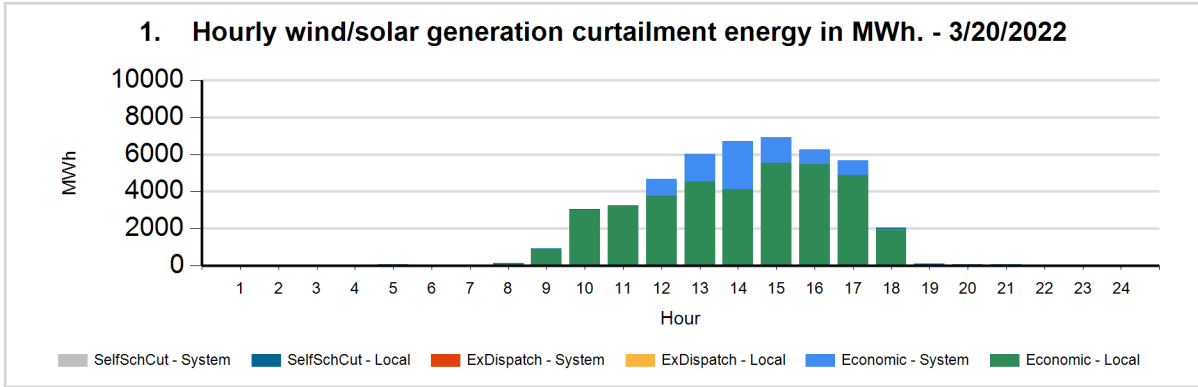
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

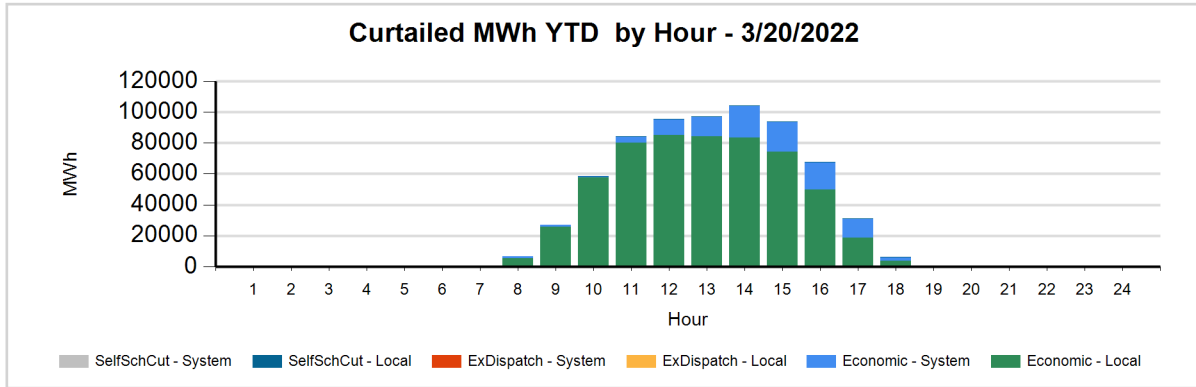
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

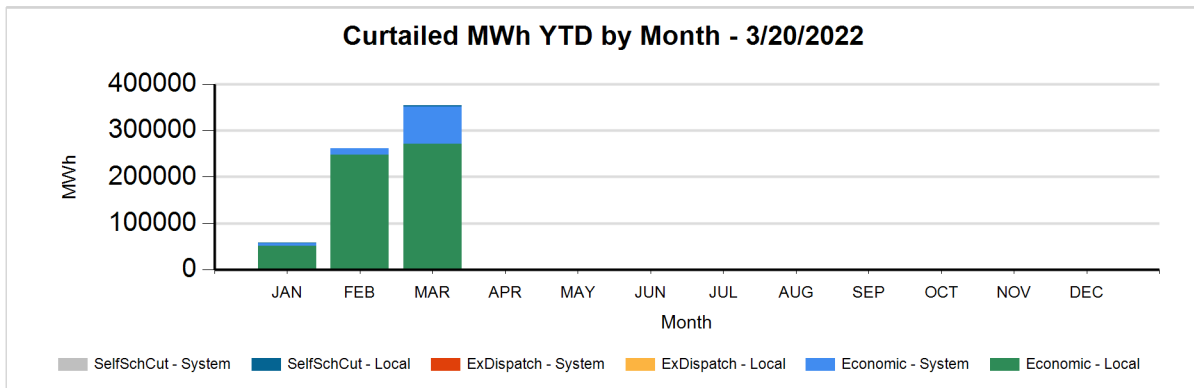
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 3/20/2022
LocalEconomic	569,128
LocalSelfSchCut	3,172
SystemEconomic	101,677
TOTAL	673,977

**Data used to produce hourly chart**

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
03/20	4	Economic	Local	WIND	5	33
03/20	4	SelfSchCut	Local	WIND	1	2
03/20	5	Economic	Local	WIND	41	52
03/20	5	SelfSchCut	Local	WIND	41	46
03/20	6	Economic	Local	WIND	25	39
03/20	6	SelfSchCut	Local	WIND	19	46
03/20	7	Economic	Local	WIND	5	15
03/20	7	SelfSchCut	Local	WIND	2	9
03/20	8	Economic	Local	SOLR	77	427
03/20	8	Economic	Local	WIND	48	97
03/20	9	Economic	Local	SOLR	651	1629
03/20	9	Economic	Local	WIND	288	308
03/20	9	Economic	System	SOLR	0	
03/20	9	Economic	System	WIND	3	
03/20	10	Economic	Local	SOLR	2686	3358
03/20	10	Economic	Local	WIND	357	326
03/20	10	Economic	System	SOLR	3	
03/20	10	SelfSchCut	Local	WIND	2	12
03/20	11	Economic	Local	SOLR	3085	3278
03/20	11	Economic	Local	WIND	153	145
03/20	11	SelfSchCut	Local	WIND	0	2
03/20	12	Economic	Local	SOLR	3380	3631
03/20	12	Economic	Local	WIND	381	399
03/20	12	Economic	System	SOLR	700	1125
03/20	12	Economic	System	WIND	214	420
03/20	13	Economic	Local	SOLR	4134	4869
03/20	13	Economic	Local	WIND	386	409
03/20	13	Economic	System	SOLR	1138	1303
03/20	13	Economic	System	WIND	358	420
03/20	14	Economic	Local	SOLR	3752	669
03/20	14	Economic	Local	WIND	349	142

03/20	14	Economic	System	SOLR	2143	5783
03/20	14	Economic	System	WIND	464	685
03/20	15	Economic	Local	SOLR	5136	5240
03/20	15	Economic	Local	WIND	399	407
03/20	15	Economic	System	SOLR	902	989
03/20	15	Economic	System	WIND	478	495
03/20	16	Economic	Local	SOLR	5022	5239
03/20	16	Economic	Local	WIND	437	545
03/20	16	Economic	System	SOLR	612	736
03/20	16	Economic	System	WIND	182	271
03/20	17	Economic	Local	SOLR	4469	4826
03/20	17	Economic	Local	WIND	414	408
03/20	17	Economic	System	SOLR	609	759
03/20	17	Economic	System	WIND	196	278
03/20	18	Economic	Local	SOLR	1758	3701
03/20	18	Economic	Local	WIND	183	522
03/20	18	Economic	System	SOLR	30	125
03/20	18	Economic	System	WIND	12	27
03/20	18	SelfSchCut	Local	SOLR	4	18
03/20	18	SelfSchCut	Local	WIND	50	101
03/20	19	Economic	Local	SOLR	26	140
03/20	19	Economic	Local	WIND	6	6
03/20	19	SelfSchCut	Local	WIND	61	68
03/20	20	Economic	Local	WIND	6	6
03/20	20	Economic	System	WIND	8	47
03/20	20	SelfSchCut	Local	WIND	50	54
03/20	21	Economic	Local	WIND	6	7
03/20	21	SelfSchCut	Local	WIND	52	78
03/20	22	Economic	Local	WIND	7	7
03/20	22	SelfSchCut	Local	WIND	28	75
03/20	23	Economic	Local	WIND	5	8
03/20	23	SelfSchCut	Local	WIND	11	45

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).

