

## Wind and Solar Curtailment January 14, 2020

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.

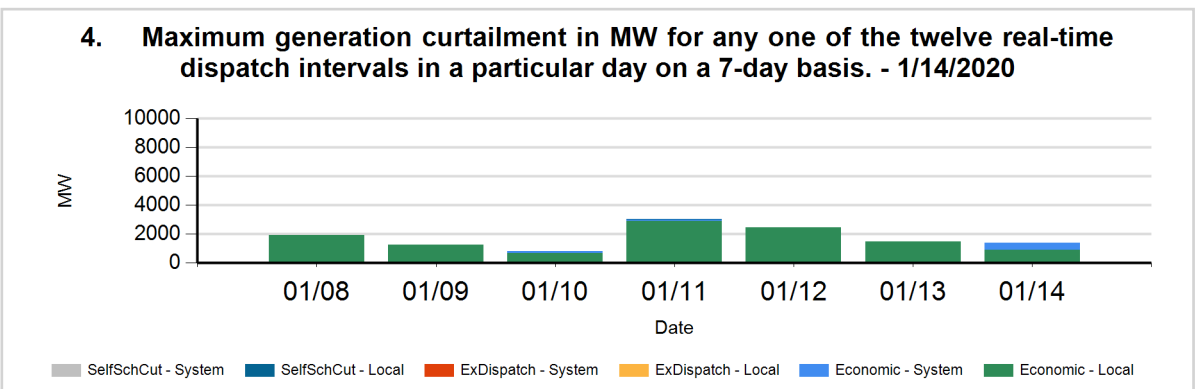
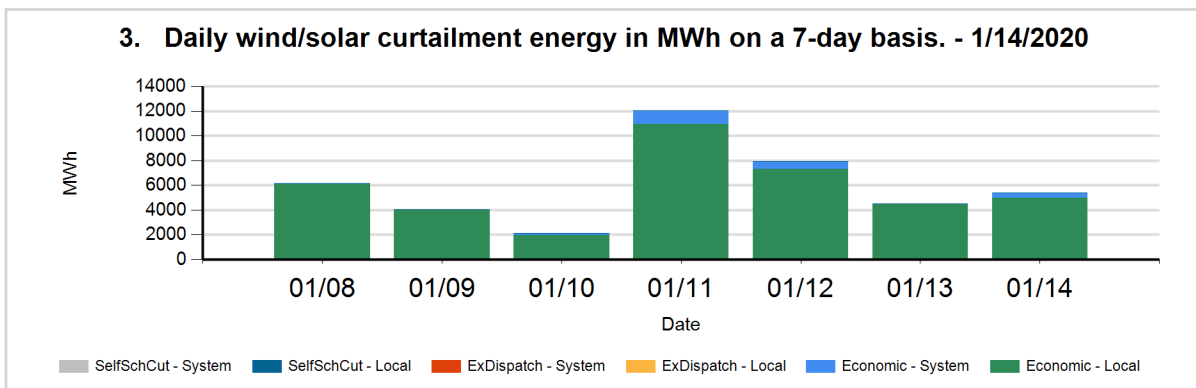
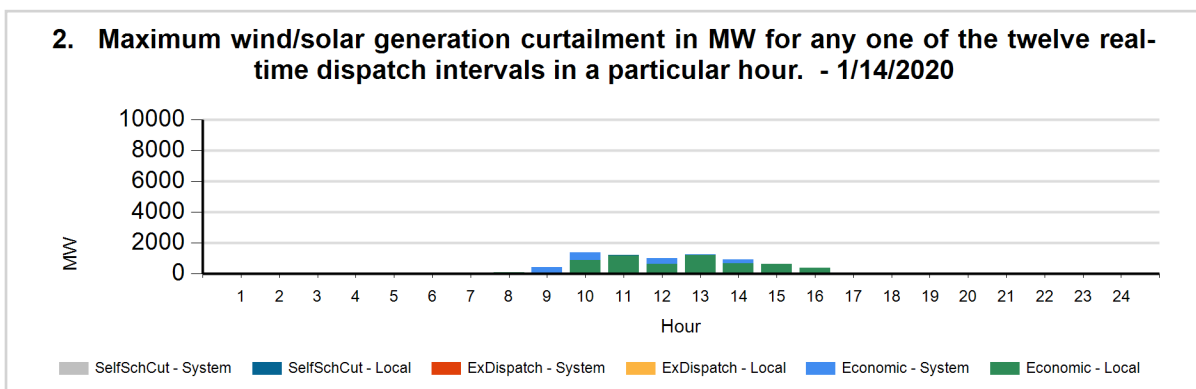
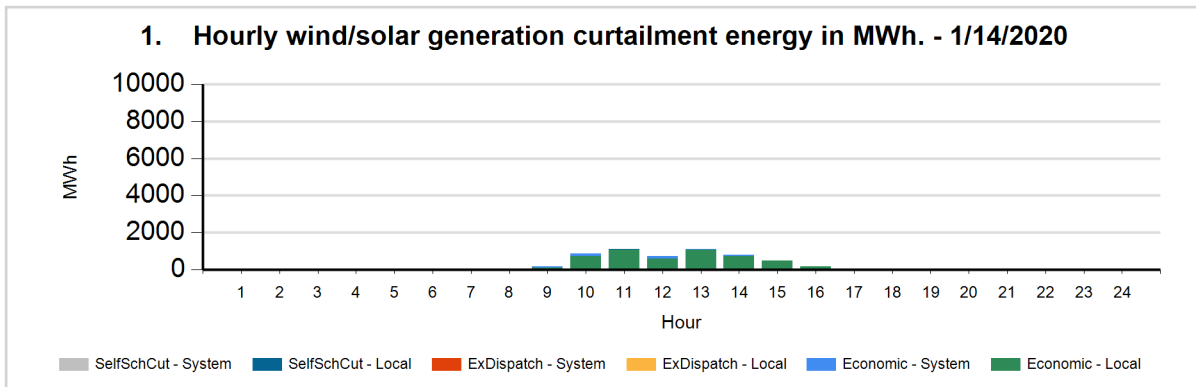
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

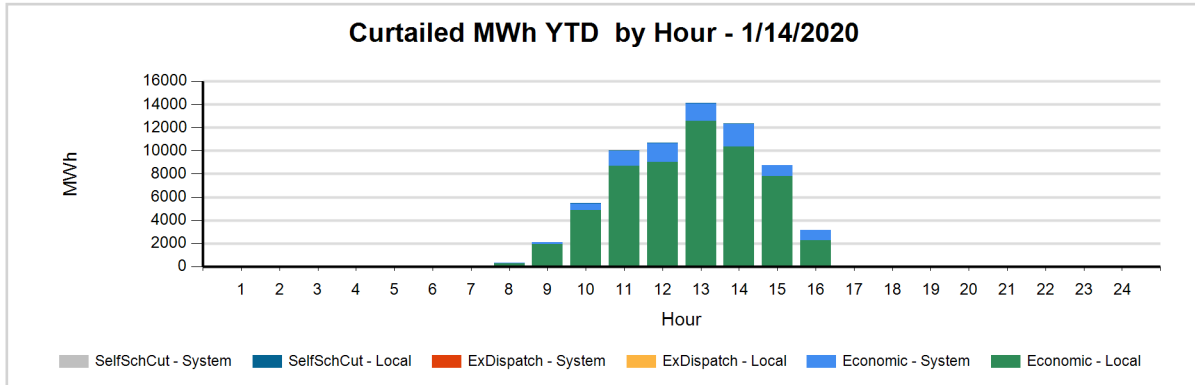
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

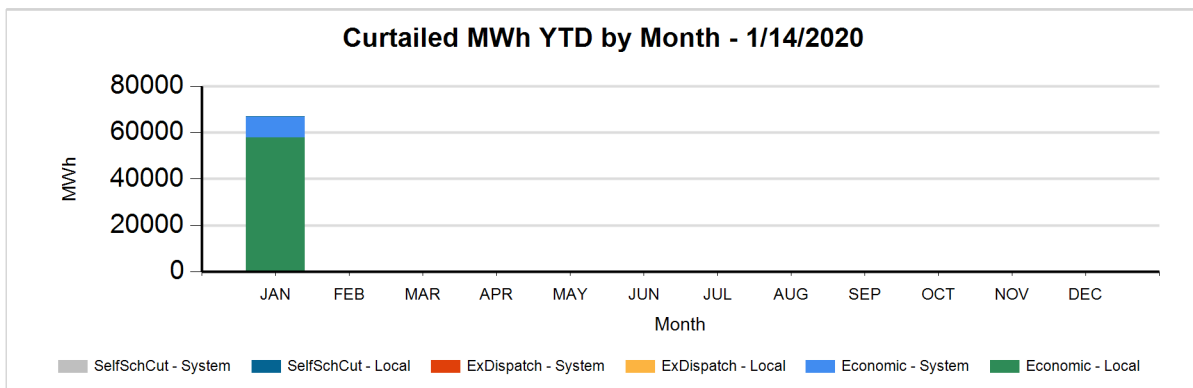
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 1/14/2020
LocalEconomic	57,769
LocalSelfSchCut	77
SystemEconomic	9,096
TOTAL	66,942

### Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
01/14	8	Economic	Local	SOLR	9	68
01/14	9	Economic	System	SOLR	48	395
01/14	9	Economic	System	WIND	5	37
01/14	10	Economic	Local	SOLR	628	757
01/14	10	Economic	Local	WIND	84	118
01/14	10	Economic	System	SOLR	149	464
01/14	10	Economic	System	WIND	13	36
01/14	11	Economic	Local	SOLR	1001	1099
01/14	11	Economic	Local	WIND	84	110
01/14	11	SelfSchCut	Local	SOLR	3	6
01/14	12	Economic	Local	SOLR	553	495
01/14	12	Economic	Local	WIND	36	108
01/14	12	Economic	System	SOLR	116	357
01/14	12	Economic	System	WIND	14	31
01/14	13	Economic	Local	SOLR	1053	1207
01/14	13	Economic	Local	WIND	21	15
01/14	13	Economic	System	SOLR	36	41
01/14	14	Economic	Local	SOLR	673	620
01/14	14	Economic	Local	WIND	54	25
01/14	14	Economic	System	SOLR	53	234
01/14	14	Economic	System	WIND	3	24
01/14	15	Economic	Local	SOLR	487	627
01/14	16	Economic	Local	SOLR	152	391
01/14	18	Economic	Local	WIND	0	5
01/14	19	Economic	System	WIND	0	3

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).

