

## Wind and Solar Curtailment January 31, 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.

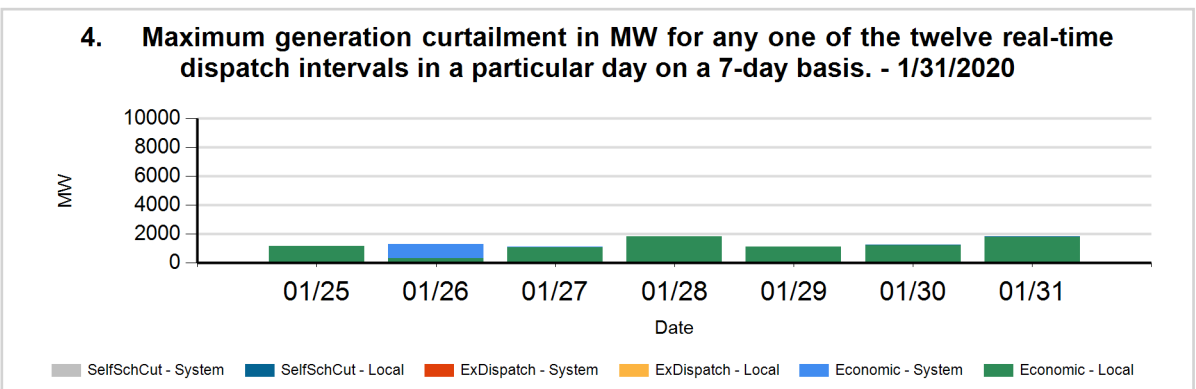
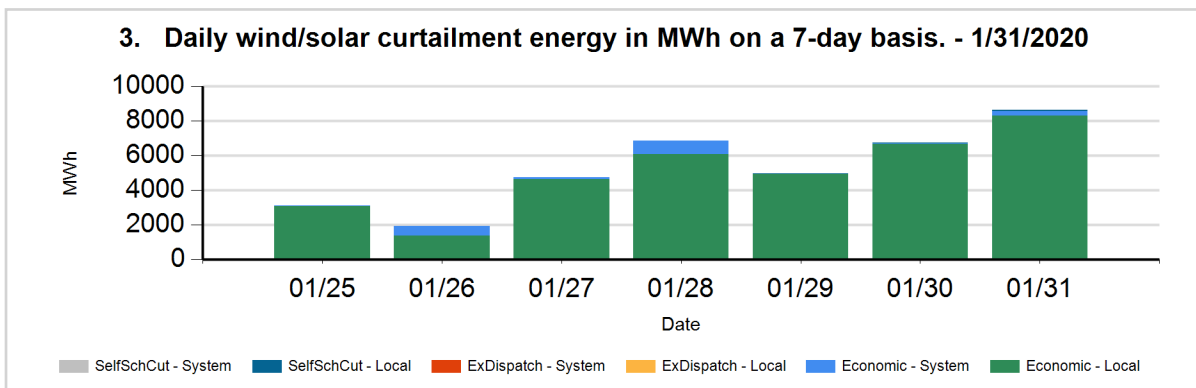
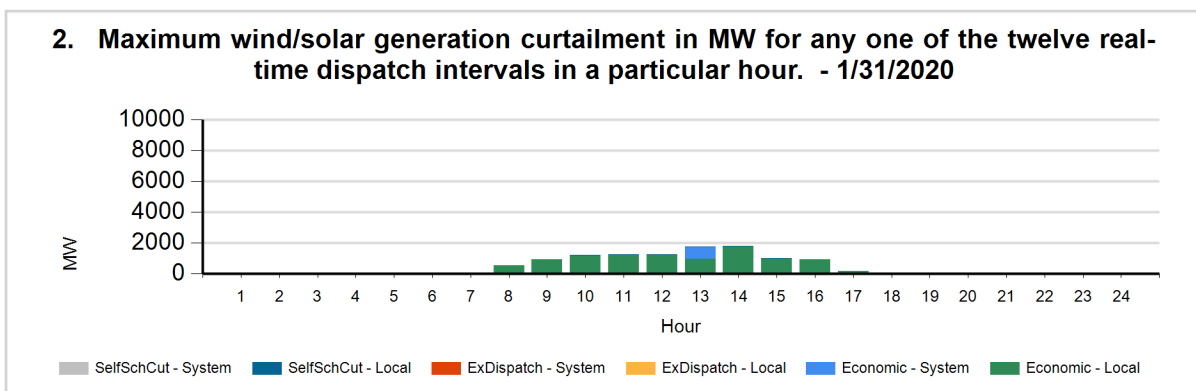
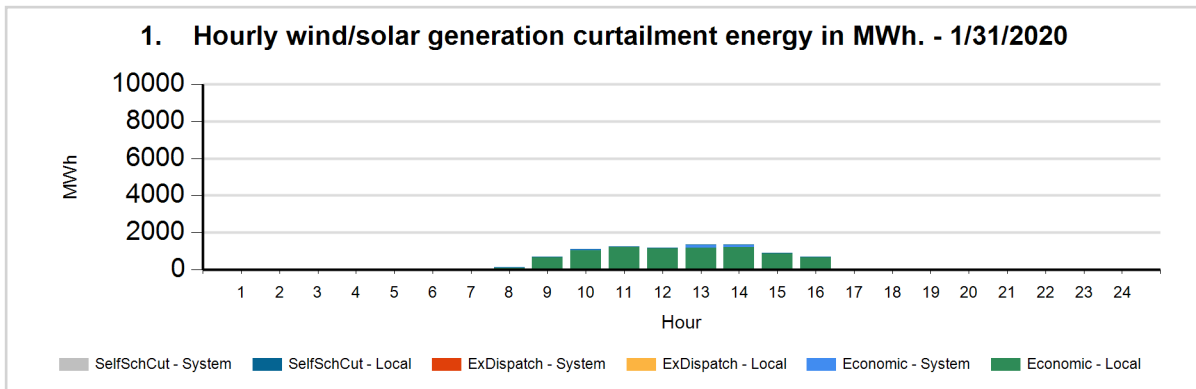
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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>.

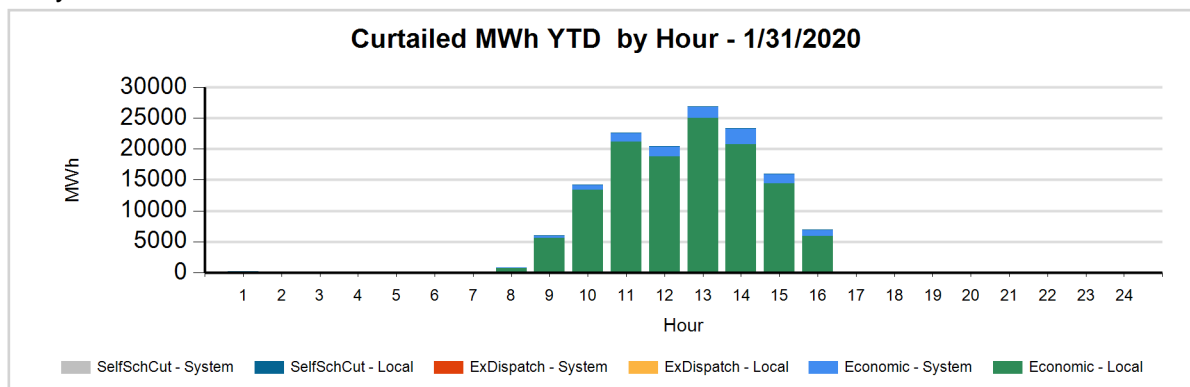
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

<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)

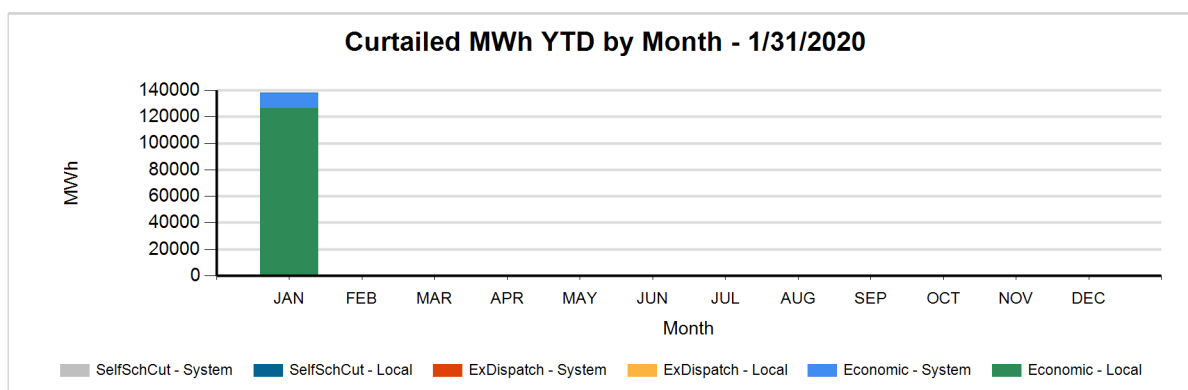
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 1/31/2020
LocalEconomic	126,394
LocalSelfSchCut	280
SystemEconomic	11,329
TOTAL	138,002

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
01/31	8	Economic	Local	SOLR	138	500
01/31	8	Economic	Local	WIND	1	18
01/31	8	Economic	System	SOLR	2	12
01/31	9	Economic	Local	SOLR	641	750
01/31	9	Economic	Local	WIND	43	135
01/31	9	Economic	System	SOLR	6	8
01/31	9	SelfSchCut	Local	SOLR	10	25
01/31	10	Economic	Local	SOLR	944	1044
01/31	10	Economic	Local	WIND	135	135
01/31	10	SelfSchCut	Local	SOLR	15	17
01/31	11	Economic	Local	SOLR	1097	1125
01/31	11	Economic	Local	WIND	134	134
01/31	11	SelfSchCut	Local	SOLR	13	6
01/31	12	Economic	Local	SOLR	1085	1075
01/31	12	Economic	Local	WIND	67	132
01/31	12	SelfSchCut	Local	SOLR	19	21
01/31	13	Economic	Local	SOLR	1177	929
01/31	13	Economic	Local	WIND	8	15
01/31	13	Economic	System	SOLR	129	787
01/31	13	Economic	System	WIND	0	1
01/31	13	SelfSchCut	Local	SOLR	21	20
01/31	14	Economic	Local	SOLR	1207	1778
01/31	14	Economic	Local	WIND	6	8
01/31	14	SelfSchCut	Local	SOLR	15	19
01/31	15	Economic	Local	SOLR	896	978
01/31	15	Economic	Local	WIND	4	5
01/31	15	SelfSchCut	Local	SOLR	7	8
01/31	16	Economic	Local	SOLR	669	904
01/31	16	Economic	Local	WIND	2	3
01/31	16	SelfSchCut	Local	SOLR	2	11
01/31	17	Economic	Local	SOLR	36	183



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).