

Wind and Solar Curtailment February 04, 2020

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why¹. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation².

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion³.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply⁴.
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.

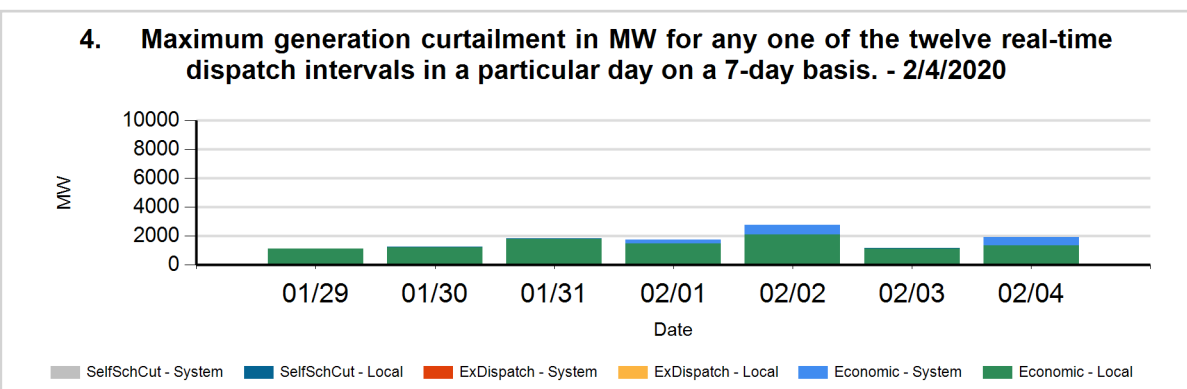
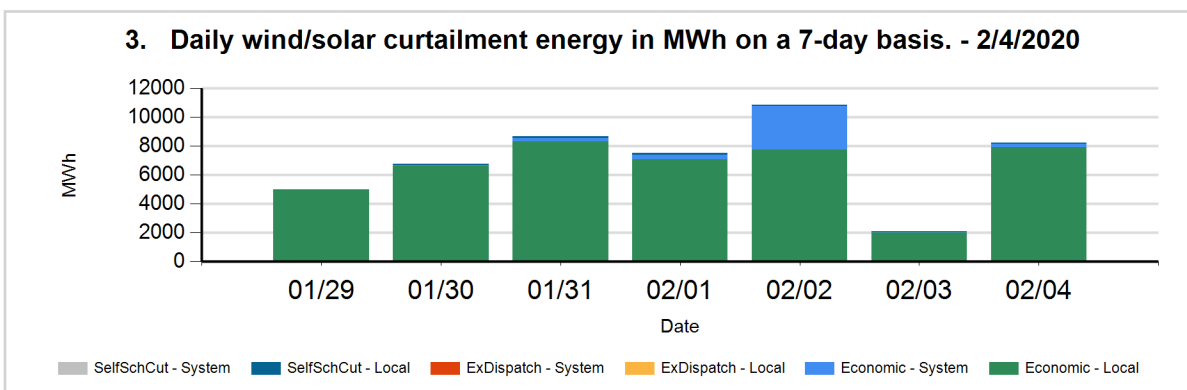
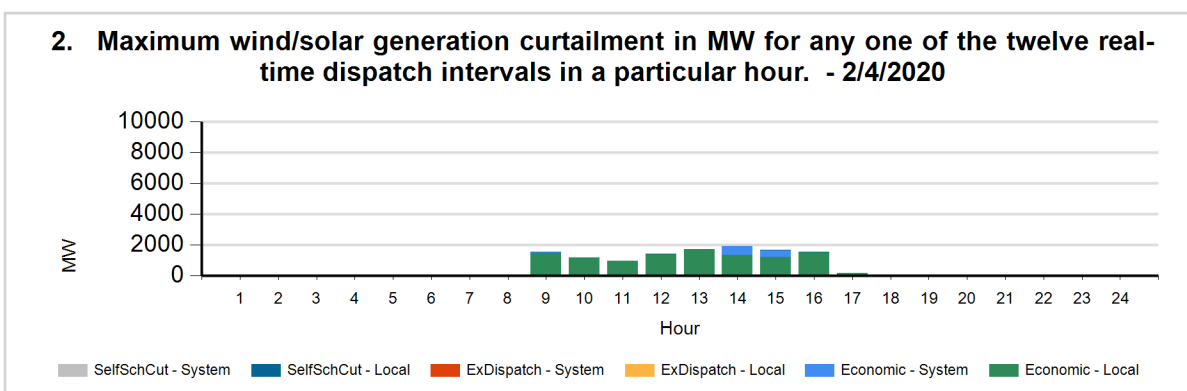
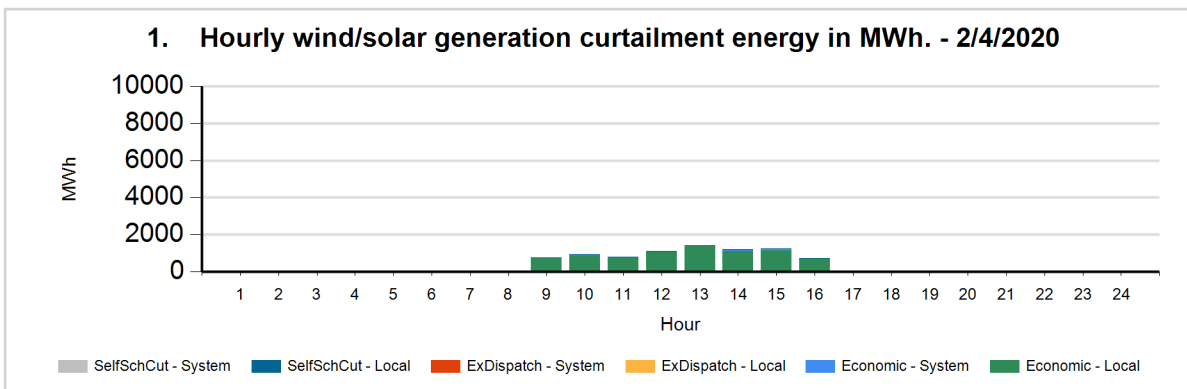
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

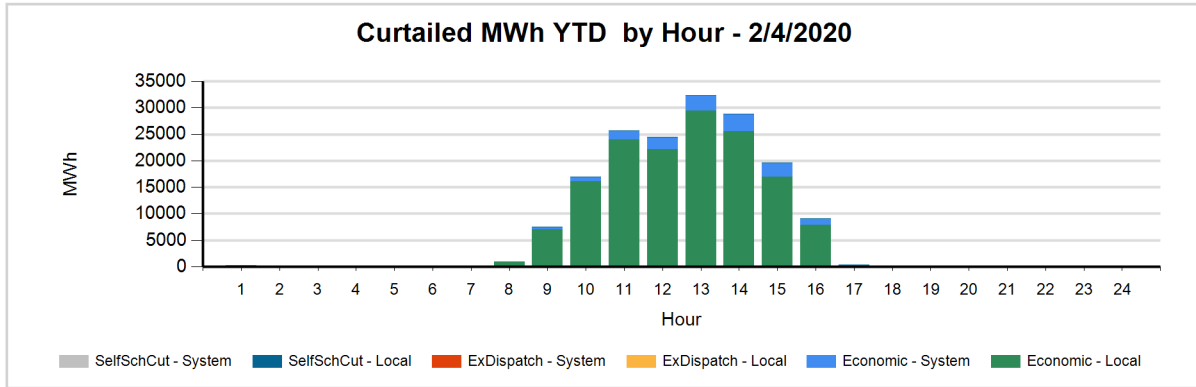
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

⁴For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

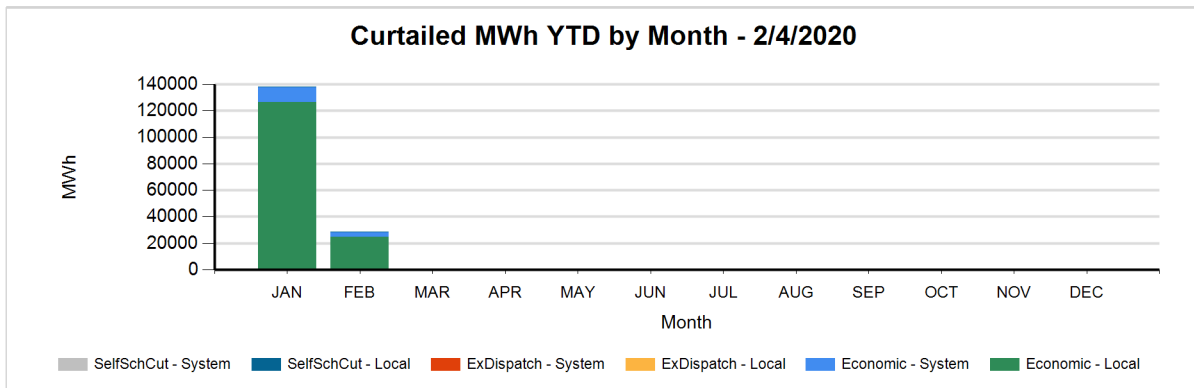
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 2/4/2020
LocalEconomic	151,190
LocalSelfSchCut	618
SystemEconomic	14,862
TOTAL	166,670

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
02/04	8	Economic	Local	SOLR	1	8
02/04	9	Economic	Local	SOLR	715	1458
02/04	9	Economic	Local	WIND	47	45
02/04	9	Economic	System	SOLR	1	5
02/04	9	Economic	System	WIND	0	4
02/04	9	SelfSchCut	Local	SOLR	10	10
02/04	10	Economic	Local	SOLR	838	1088
02/04	10	Economic	Local	WIND	70	66
02/04	10	Economic	System	SOLR	2	
02/04	10	SelfSchCut	Local	SOLR	8	21
02/04	11	Economic	Local	SOLR	728	908
02/04	11	Economic	Local	WIND	62	57
02/04	11	SelfSchCut	Local	SOLR	4	
02/04	12	Economic	Local	SOLR	915	1230
02/04	12	Economic	Local	WIND	153	161
02/04	12	Economic	System	SOLR	18	
02/04	12	Economic	System	WIND	7	
02/04	12	SelfSchCut	Local	SOLR	6	6
02/04	13	Economic	Local	SOLR	1354	1651
02/04	13	Economic	Local	WIND	54	45
02/04	13	SelfSchCut	Local	SOLR	12	11
02/04	14	Economic	Local	SOLR	1058	1277
02/04	14	Economic	Local	WIND	44	41
02/04	14	Economic	System	SOLR	100	574
02/04	14	Economic	System	WIND	4	13
02/04	14	SelfSchCut	Local	SOLR	7	
02/04	15	Economic	Local	SOLR	1107	1159
02/04	15	Economic	Local	WIND	38	40
02/04	15	Economic	System	SOLR	77	451
02/04	15	Economic	System	WIND	3	13
02/04	15	SelfSchCut	Local	SOLR	11	18

02/04	16	Economic	Local	SOLR	690	1407
02/04	16	Economic	Local	WIND	17	118
02/04	16	SelfSchCut	Local	SOLR	12	18
02/04	17	Economic	Local	SOLR	32	143
02/04	17	Economic	Local	WIND	1	2
02/04	20	Economic	Local	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.