

Wind and Solar Curtailment February 02, 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.

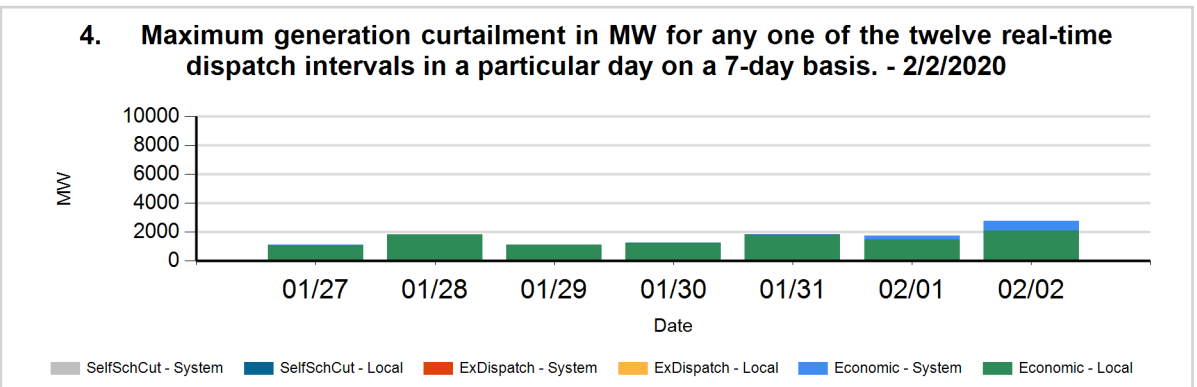
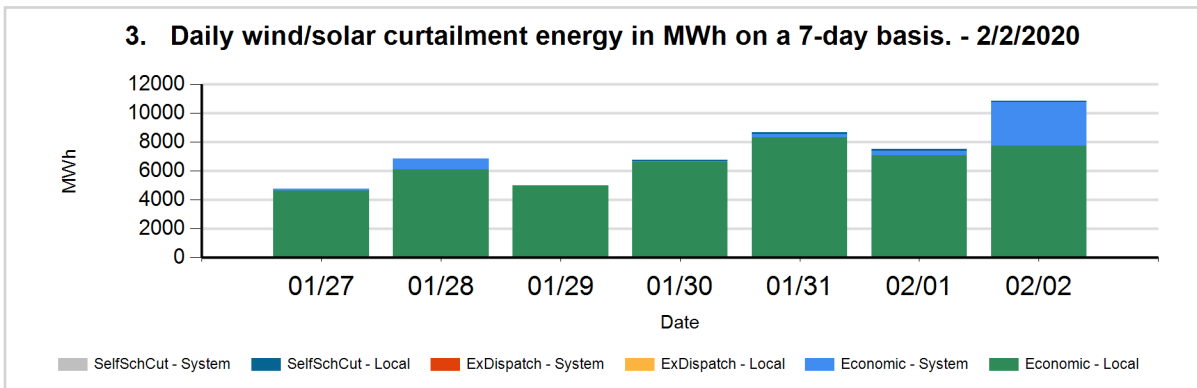
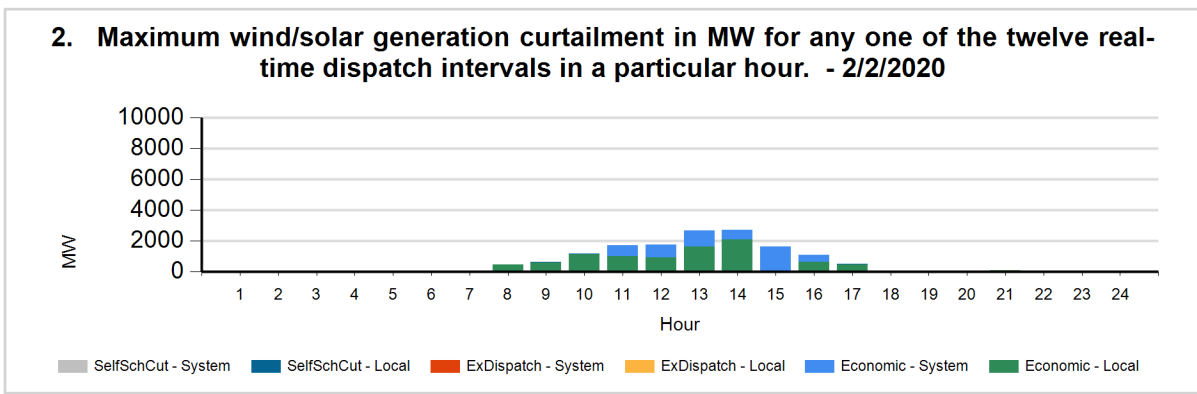
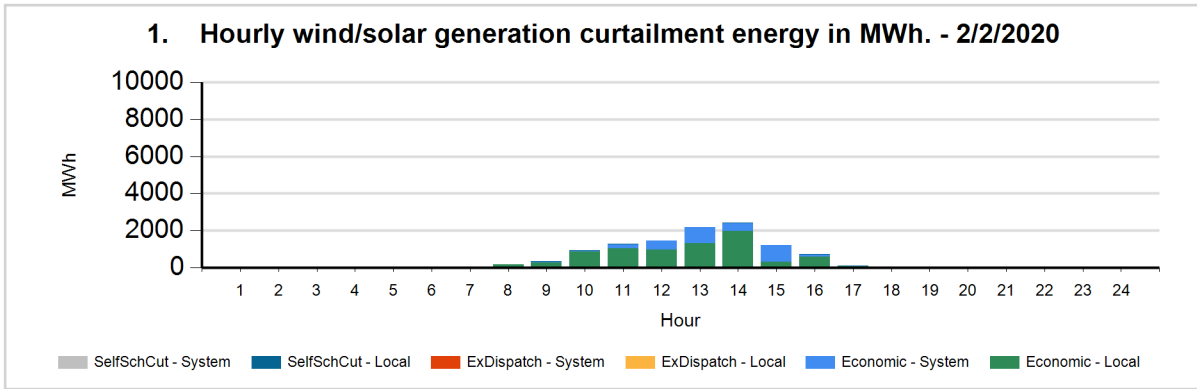
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

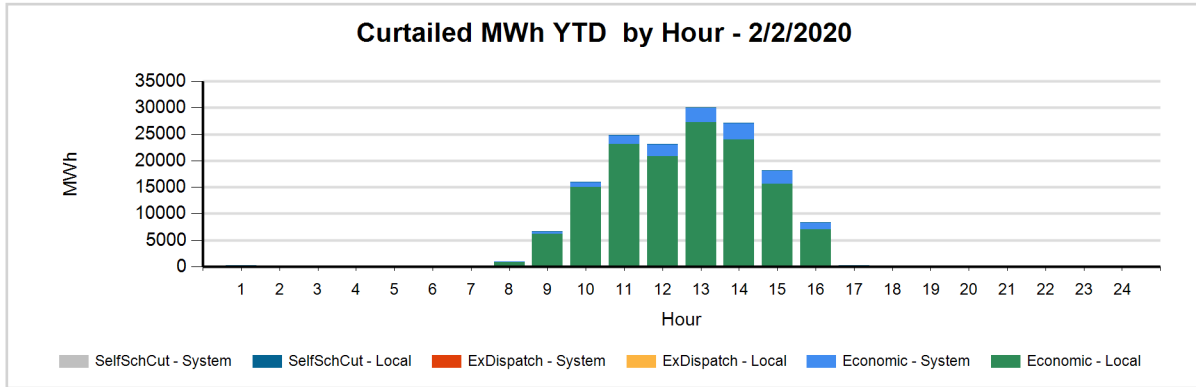
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

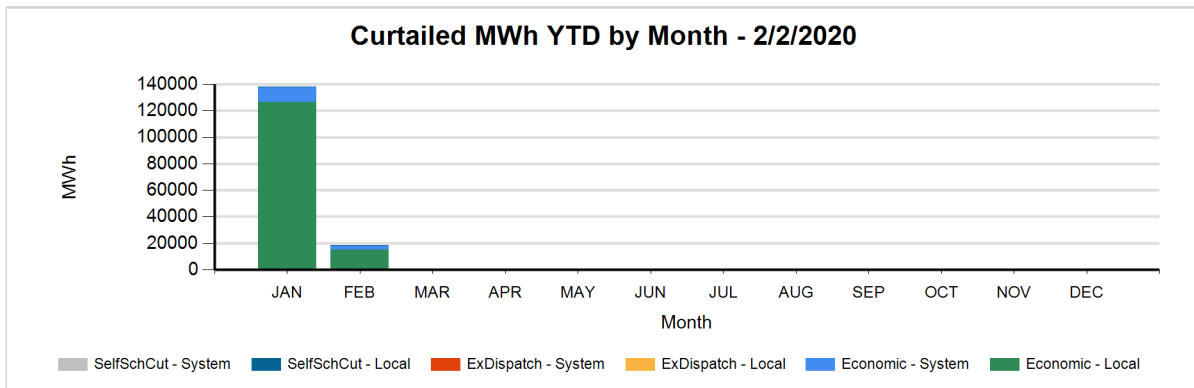
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 2/2/2020
LocalEconomic	141,204
LocalSelfSchCut	502
SystemEconomic	14,649
TOTAL	156,354

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
02/02	1	Economic	Local	WIND	21	46
02/02	2	Economic	Local	WIND	20	37
02/02	7	Economic	Local	SOLR	3	18
02/02	8	Economic	Local	SOLR	182	470
02/02	8	Economic	Local	WIND	1	3
02/02	9	Economic	Local	SOLR	315	602
02/02	9	Economic	System	SOLR	1	
02/02	9	SelfSchCut	Local	SOLR	19	29
02/02	10	Economic	Local	SOLR	903	1143
02/02	10	Economic	Local	WIND	2	2
02/02	10	Economic	System	SOLR	8	
02/02	10	SelfSchCut	Local	SOLR	25	23
02/02	11	Economic	Local	SOLR	1035	988
02/02	11	Economic	Local	WIND	6	7
02/02	11	Economic	System	SOLR	191	669
02/02	11	Economic	System	WIND	18	45
02/02	11	SelfSchCut	Local	SOLR	11	
02/02	12	Economic	Local	SOLR	955	918
02/02	12	Economic	Local	WIND	12	14
02/02	12	Economic	System	SOLR	440	804
02/02	12	Economic	System	WIND	27	28
02/02	13	Economic	Local	SOLR	1266	1421
02/02	13	Economic	Local	WIND	33	200
02/02	13	Economic	System	SOLR	859	1013
02/02	13	Economic	System	WIND	31	32
02/02	14	Economic	Local	SOLR	1858	1943
02/02	14	Economic	Local	WIND	118	146
02/02	14	Economic	System	SOLR	384	603
02/02	14	Economic	System	WIND	30	35
02/02	14	SelfSchCut	Local	SOLR	17	
02/02	15	Economic	Local	SOLR	281	

02/02	15	Economic	Local	WIND	21	
02/02	15	Economic	System	SOLR	851	1574
02/02	15	Economic	System	WIND	45	69
02/02	16	Economic	Local	SOLR	571	621
02/02	16	Economic	Local	WIND	12	8
02/02	16	Economic	System	SOLR	117	404
02/02	16	Economic	System	WIND	11	34
02/02	16	SelfSchCut	Local	SOLR	19	
02/02	17	Economic	Local	SOLR	100	499
02/02	17	Economic	Local	WIND	2	7
02/02	17	SelfSchCut	Local	SOLR	1	7
02/02	18	Economic	Local	WIND	1	5
02/02	19	Economic	Local	WIND	1	12
02/02	21	Economic	Local	WIND	7	67
02/02	22	Economic	Local	WIND	1	12

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.