

Wind and Solar Curtailment February 11, 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.

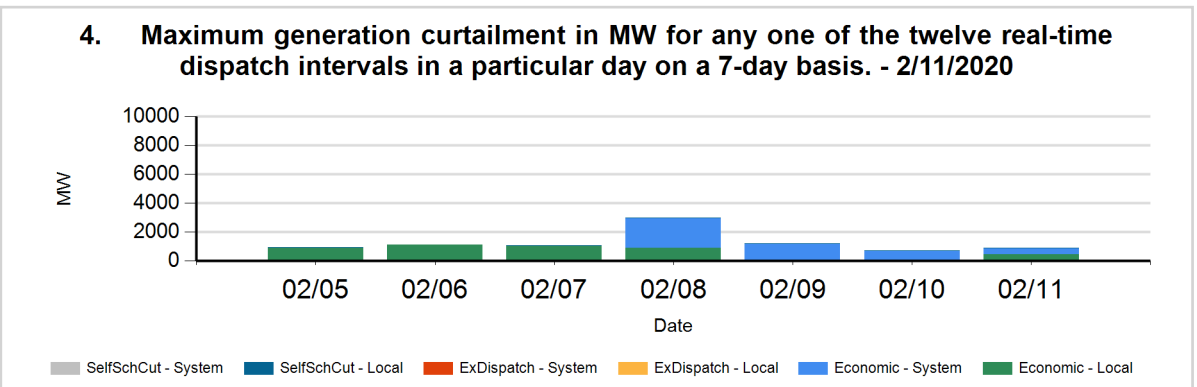
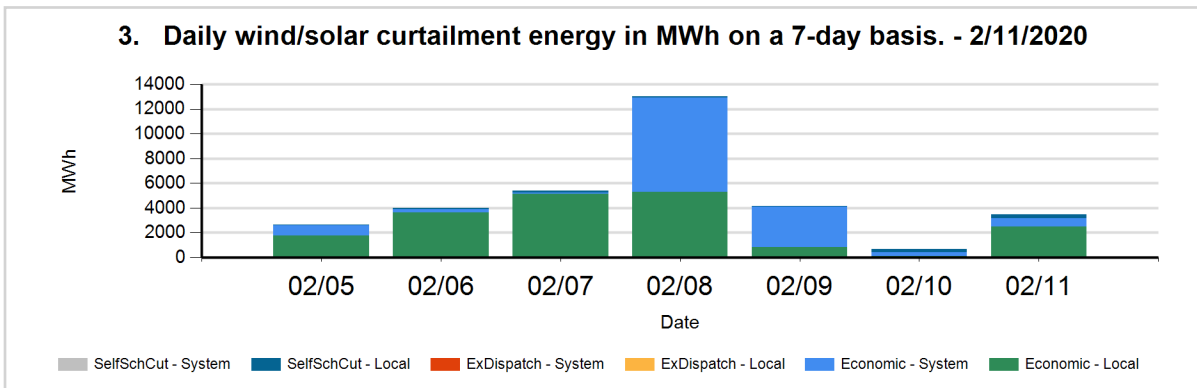
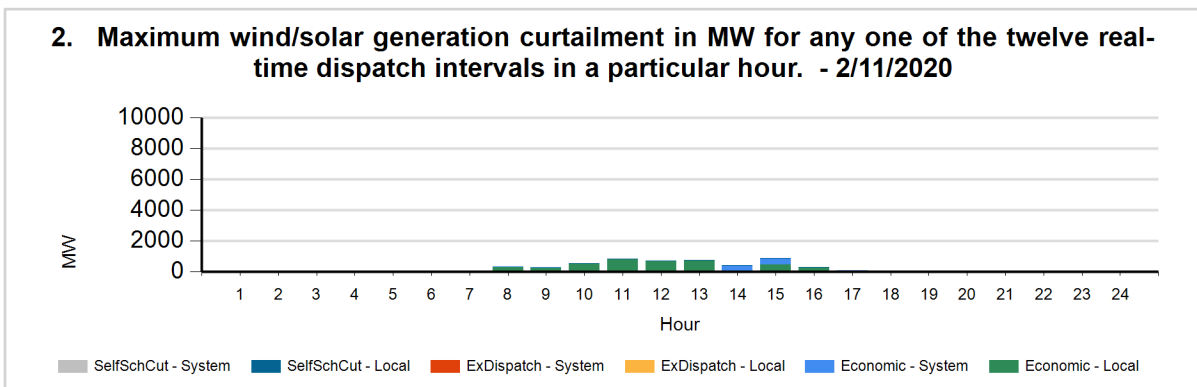
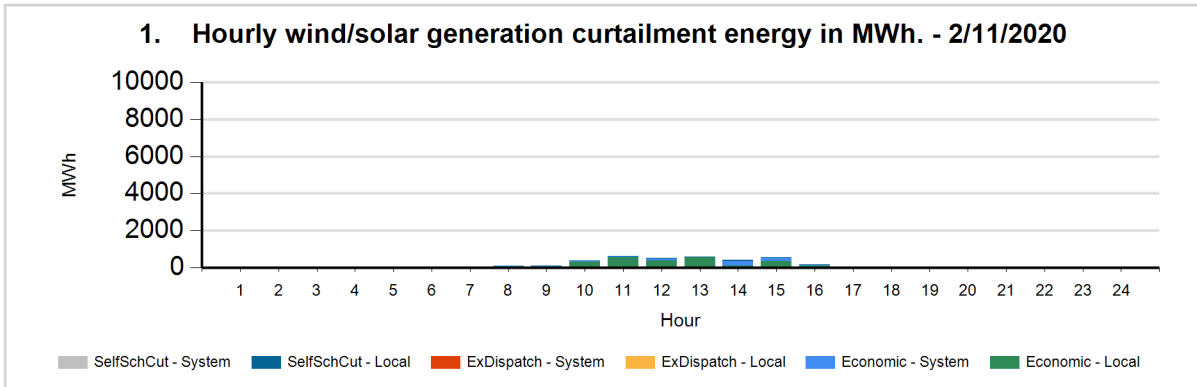
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

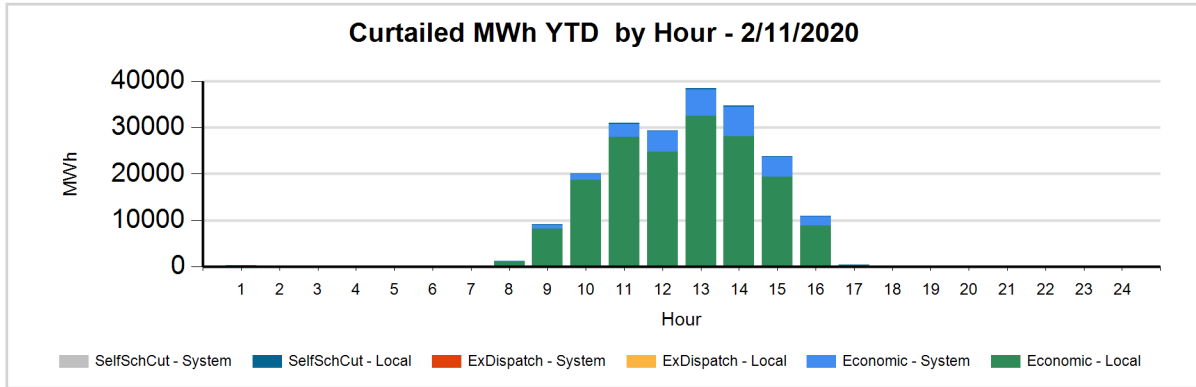
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

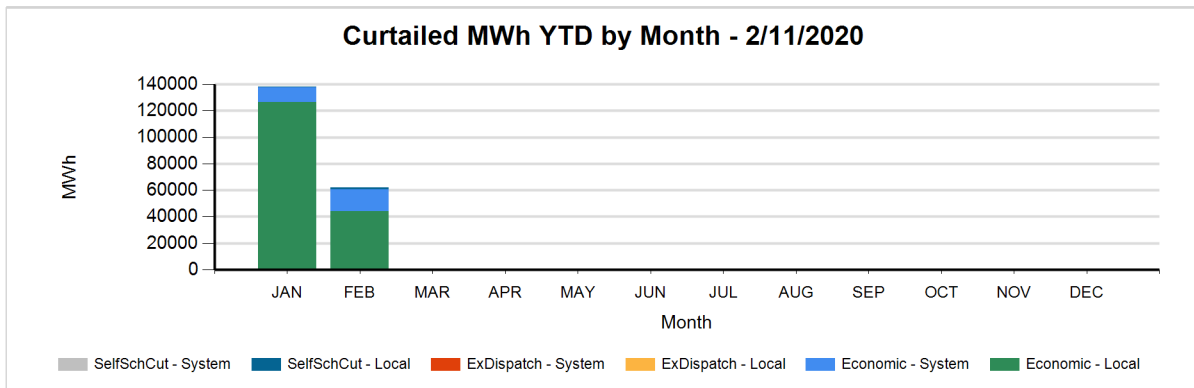
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 2/11/2020
LocalEconomic	170,491
LocalSelfSchCut	1,610
SystemEconomic	27,893
TOTAL	199,993

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
02/11	8	Economic	Local	SOLR	57	170
02/11	8	Economic	Local	WIND	27	135
02/11	8	Economic	System	SOLR	2	8
02/11	9	Economic	Local	SOLR	42	232
02/11	9	Economic	System	SOLR	48	50
02/11	9	SelfSchCut	Local	SOLR	9	
02/11	10	Economic	Local	SOLR	259	455
02/11	10	Economic	Local	WIND	38	44
02/11	10	Economic	System	SOLR	42	
02/11	10	Economic	System	WIND	8	
02/11	10	SelfSchCut	Local	SOLR	33	39
02/11	11	Economic	Local	SOLR	509	668
02/11	11	Economic	Local	WIND	71	118
02/11	11	Economic	System	SOLR	3	
02/11	11	SelfSchCut	Local	SOLR	48	37
02/11	12	Economic	Local	SOLR	363	611
02/11	12	Economic	Local	WIND	28	38
02/11	12	Economic	System	SOLR	86	
02/11	12	Economic	System	WIND	10	
02/11	12	SelfSchCut	Local	SOLR	41	49
02/11	13	Economic	Local	SOLR	499	670
02/11	13	Economic	Local	WIND	37	36
02/11	13	SelfSchCut	Local	SOLR	53	54
02/11	14	Economic	Local	SOLR	109	
02/11	14	Economic	Local	WIND	8	
02/11	14	Economic	System	SOLR	219	349
02/11	14	Economic	System	WIND	17	27
02/11	14	SelfSchCut	Local	SOLR	52	52
02/11	15	Economic	Local	SOLR	314	411
02/11	15	Economic	Local	WIND	30	40
02/11	15	Economic	System	SOLR	176	424

02/11	15	Economic	System	WIND	4	4
02/11	15	SelfSchCut	Local	SOLR	21	12
02/11	16	Economic	Local	SOLR	106	250
02/11	16	Economic	System	SOLR	64	
02/11	16	SelfSchCut	Local	SOLR	10	24
02/11	17	Economic	Local	SOLR	3	
02/11	17	Economic	System	SOLR	9	66

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.