

## Wind and Solar Curtailment February 20, 2021

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 congestion<sup>3</sup>.
- 2. Economic System: Market dispatch of generators with economic bids to mitigate system-wide oversupply.
- 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.

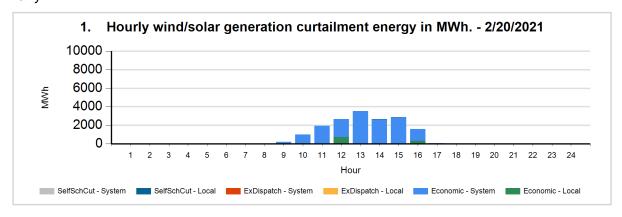
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

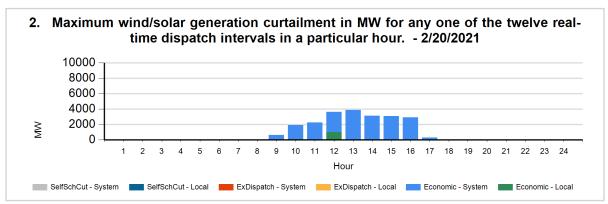
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

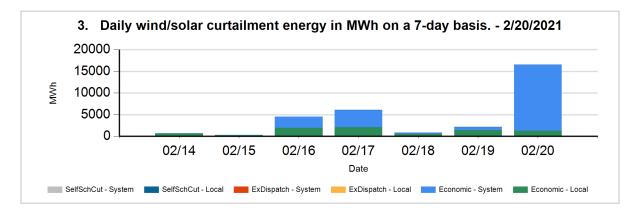
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

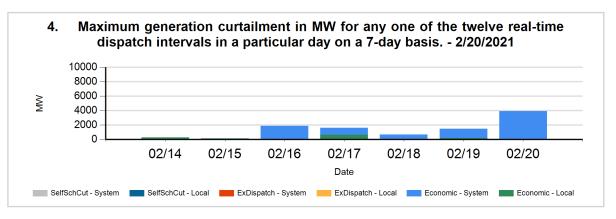


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



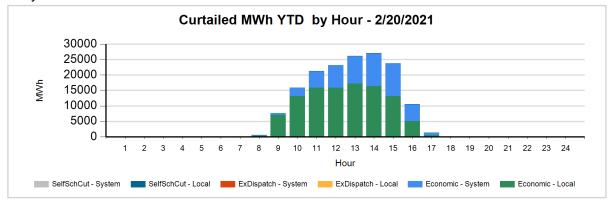




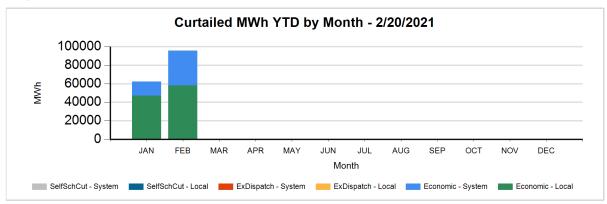




The following charts show hourly year to date wind and solar curtailment by category, if any.



The following charts show monthly year to date wind and solar curtailment by category, if any.



TYPE	YTD CURTAILED MWH - 2/20/2021
LocalEconomic	105,168
LocalSelfSchCut	441
SystemEconomic	52,266
TOTAL	157,876



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
02/20	8	Economic	Local	SOLR	4	
02/20	8	Economic	System	SOLR	10	47
02/20	9	Economic	Local	SOLR	45	57
02/20	9	Economic	System	SOLR	160	535
02/20	9	Economic	System	WIND	16	40
02/20	10	Economic	Local	SOLR	72	83
02/20	10	Economic	System	SOLR	910	1792
02/20	10	Economic	System	WIND	33	43
02/20	11	Economic	Local	SOLR	18	30
02/20	11	Economic	System	SOLR	1863	2143
02/20	11	Economic	System	WIND	55	57
02/20	12	Economic	Local	SOLR	705	943
02/20	12	Economic	Local	WIND	20	60
02/20	12	Economic	System	SOLR	1858	2274
02/20	12	Economic	System	WIND	95	336
02/20	13	Economic	Local	SOLR	13	
02/20	13	Economic	Local	WIND	2	
02/20	13	Economic	System	SOLR	3302	3447
02/20	13	Economic	System	WIND	212	436
02/20	14	Economic	Local	SOLR	29	34
02/20	14	Economic	System	SOLR	2546	2988
02/20	14	Economic	System	WIND	90	94
02/20	14	SelfSchCut	Local	SOLR	2	
02/20	15	Economic	Local	SOLR	24	
02/20	15	Economic	System	SOLR	2726	2997
02/20	15	Economic	System	WIND	101	102
02/20	15	SelfSchCut	Local	SOLR	1	
02/20	16	Economic	Local	SOLR	280	53
02/20	16	Economic	Local	WIND	16	
02/20	16	Economic	System	SOLR	1189	2583
02/20	16	Economic	System	WIND	88	296



02/20	17	Economic	Local	SOLR	20	40
02/20	17	Economic	System	SOLR	33	217
02/20	17	Economic	System	WIND	6	32

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.