

Wind and Solar Curtailment April 17, 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 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.

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.

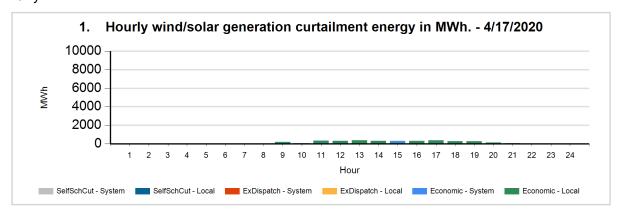
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

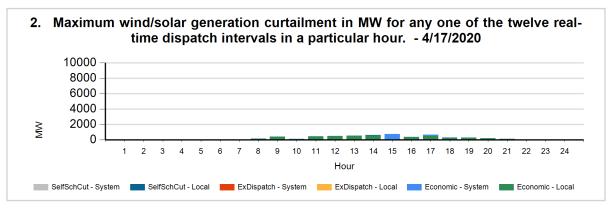
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

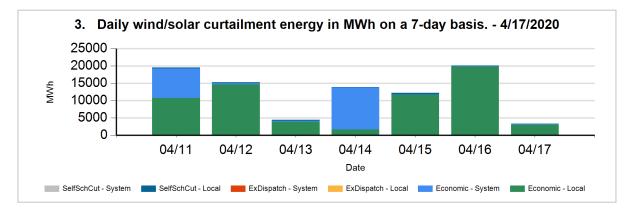
For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables FastFacts.pdf

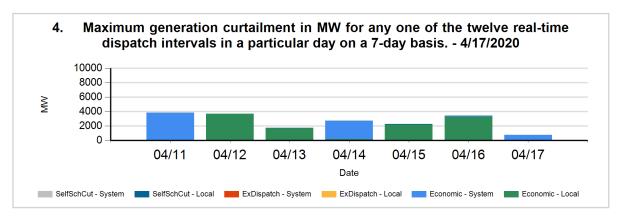


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



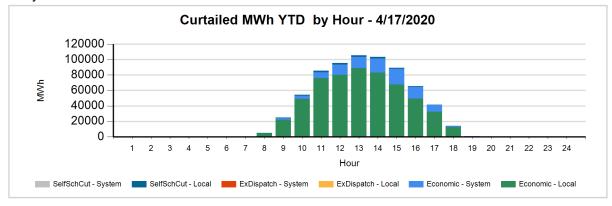




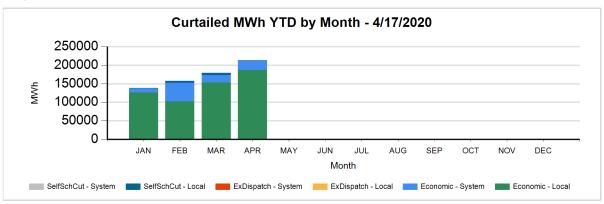




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/17/2020
LocalEconomic	567,699
LocalSelfSchCut	12,885
SystemEconomic	106,308
TOTAL	686,892



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/17	1	Economic	Local	WIND	1	6
04/17	7	Economic	System	SOLR	1	9
04/17	8	Economic	Local	SOLR	18	144
04/17	8	Economic	Local	WIND	2	9
04/17	8	Economic	System	SOLR	0	6
04/17	9	Economic	Local	SOLR	170	376
04/17	9	Economic	Local	WIND	15	18
04/17	9	Economic	System	SOLR	5	
04/17	10	Economic	Local	SOLR	29	107
04/17	10	Economic	Local	WIND	10	20
04/17	10	Economic	System	SOLR	14	11
04/17	11	Economic	Local	SOLR	283	421
04/17	11	Economic	Local	WIND	49	30
04/17	11	Economic	System	SOLR	1	
04/17	12	Economic	Local	SOLR	259	412
04/17	12	Economic	Local	WIND	42	72
04/17	12	SelfSchCut	Local	SOLR	4	
04/17	13	Economic	Local	SOLR	300	408
04/17	13	Economic	Local	WIND	64	145
04/17	14	Economic	Local	SOLR	251	499
04/17	14	Economic	Local	WIND	61	89
04/17	14	Economic	System	SOLR	3	33
04/17	14	Economic	System	WIND	3	4
04/17	14	SelfSchCut	Local	SOLR	1	3
04/17	15	Economic	Local	SOLR	26	9
04/17	15	Economic	Local	WIND	58	27
04/17	15	Economic	System	SOLR	213	646
04/17	15	Economic	System	WIND	22	64
04/17	16	Economic	Local	SOLR	44	64
04/17	16	Economic	Local	WIND	250	303
04/17	17	Economic	Local	SOLR	70	188



04/17	17	Economic	Local	WIND	278	318
04/17	17	Economic	System	SOLR	15	145
04/17	18	Economic	Local	SOLR	1	
04/17	18	Economic	Local	WIND	256	285
04/17	18	SelfSchCut	Local	WIND	4	14
04/17	19	Economic	Local	WIND	268	299
04/17	20	Economic	Local	WIND	136	190
04/17	21	Economic	Local	WIND	82	110
04/17	22	Economic	Local	WIND	8	45

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.