

Wind and Solar Curtailment April 03, 2019

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.

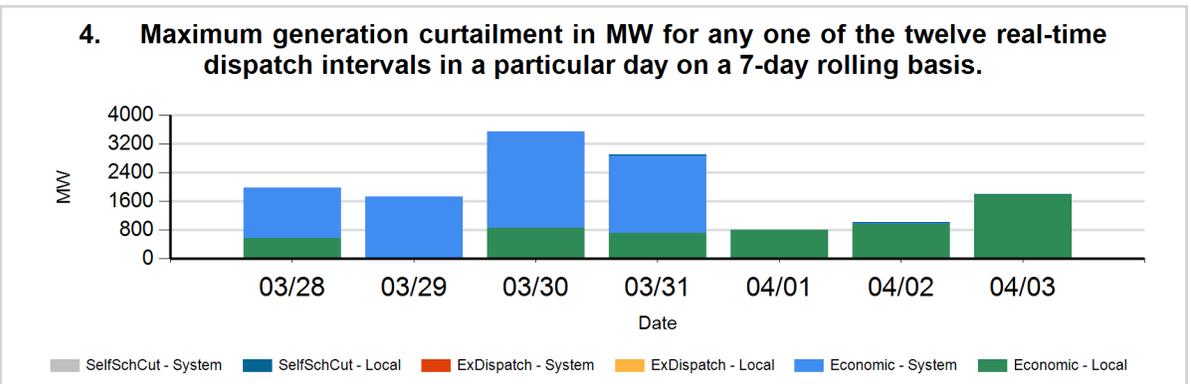
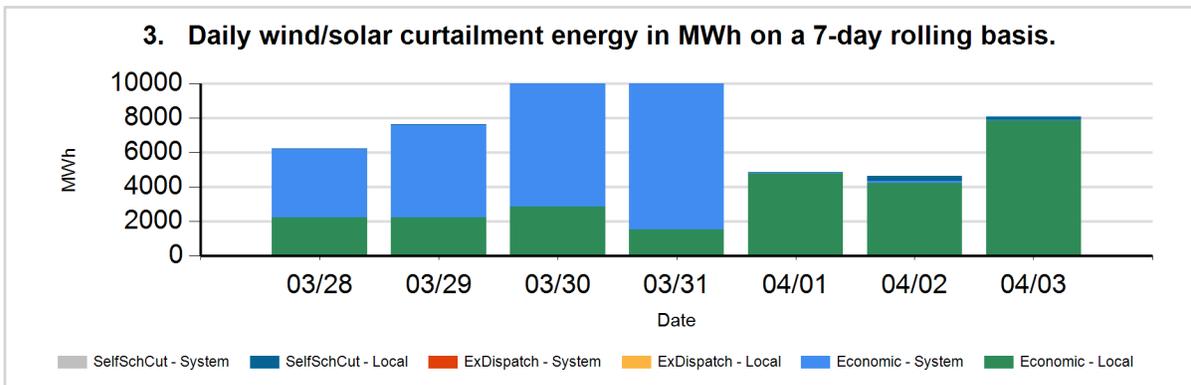
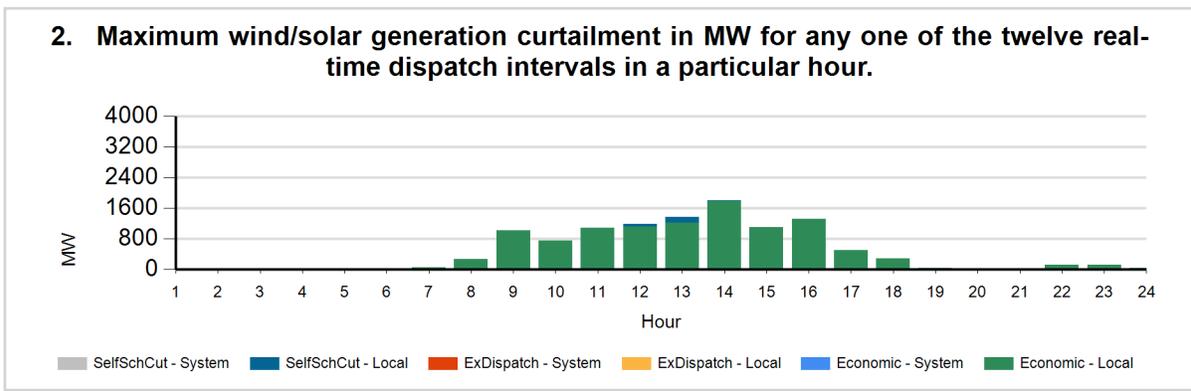
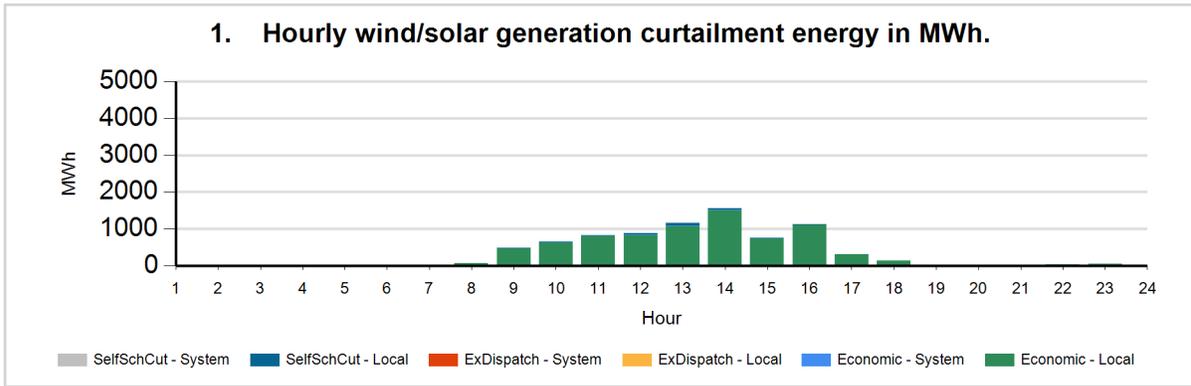
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

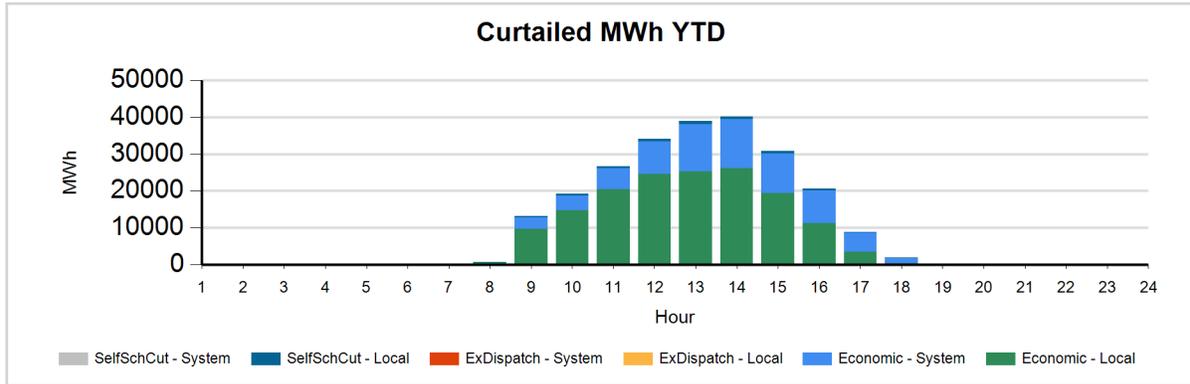
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

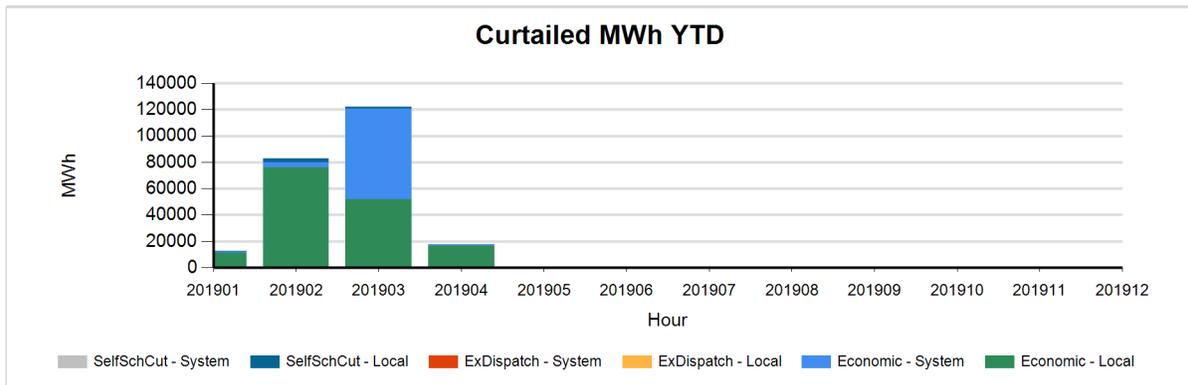
The following charts show the daily and 7-day rolling wind and solar curtailment by category, if any.



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
LocalEconomic	155,930
LocalSelfSchCut	5,133
SystemEconomic	74,106
TOTAL	235,169

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/03	7	Economic	Local	WIND	8	48
04/03	8	Economic	Local	SOLR	40	220
04/03	8	Economic	Local	WIND	27	46
04/03	9	Economic	Local	SOLR	371	805
04/03	9	Economic	Local	WIND	97	216
04/03	10	Economic	Local	SOLR	492	579
04/03	10	Economic	Local	WIND	154	176
04/03	11	Economic	Local	SOLR	740	1028
04/03	11	Economic	Local	WIND	93	48
04/03	12	Economic	Local	SOLR	768	1070
04/03	12	Economic	Local	WIND	66	46
04/03	12	SelfSchCut	Local	SOLR	33	63
04/03	13	Economic	Local	SOLR	967	1099
04/03	13	Economic	Local	WIND	118	114
04/03	13	SelfSchCut	Local	SOLR	33	21
04/03	13	SelfSchCut	Local	WIND	42	130
04/03	14	Economic	Local	SOLR	1410	1686
04/03	14	Economic	Local	WIND	106	113
04/03	14	SelfSchCut	Local	WIND	30	1
04/03	15	Economic	Local	SOLR	659	966
04/03	15	Economic	Local	WIND	90	126
04/03	16	Economic	Local	SOLR	1000	1189
04/03	16	Economic	Local	WIND	116	130
04/03	17	Economic	Local	SOLR	219	436
04/03	17	Economic	Local	WIND	86	68
04/03	18	Economic	Local	SOLR	47	123
04/03	18	Economic	Local	WIND	95	151
04/03	19	Economic	Local	WIND	9	24
04/03	21	Economic	Local	WIND	5	21
04/03	22	Economic	Local	WIND	28	120
04/03	23	Economic	Local	WIND	49	119
04/03	24	Economic	Local	WIND	10	36

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.