

Wind and Solar Curtailment September 09, 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.

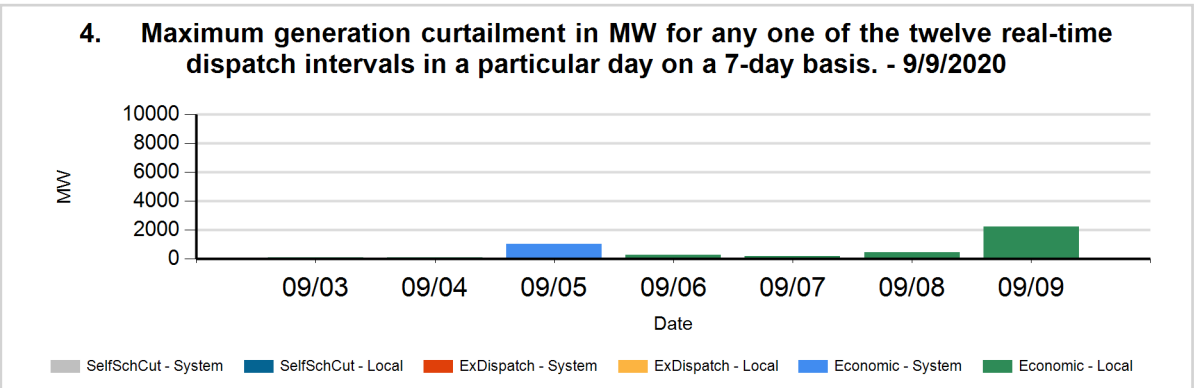
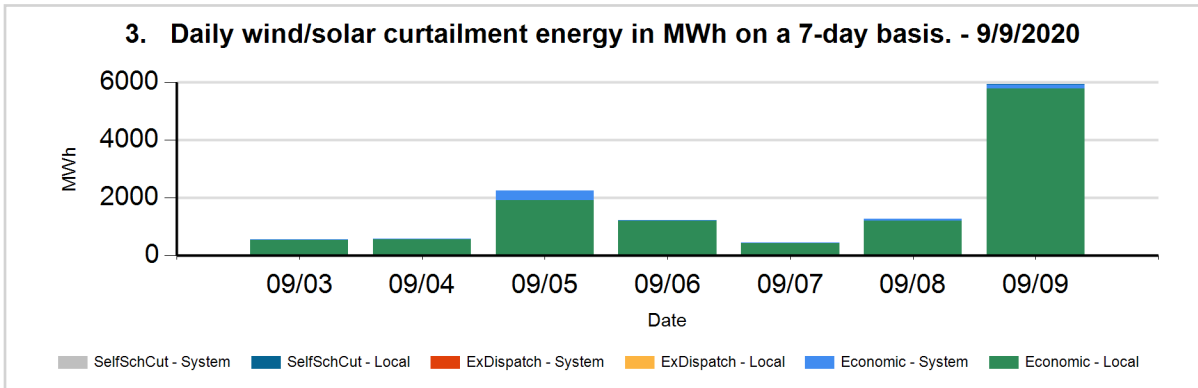
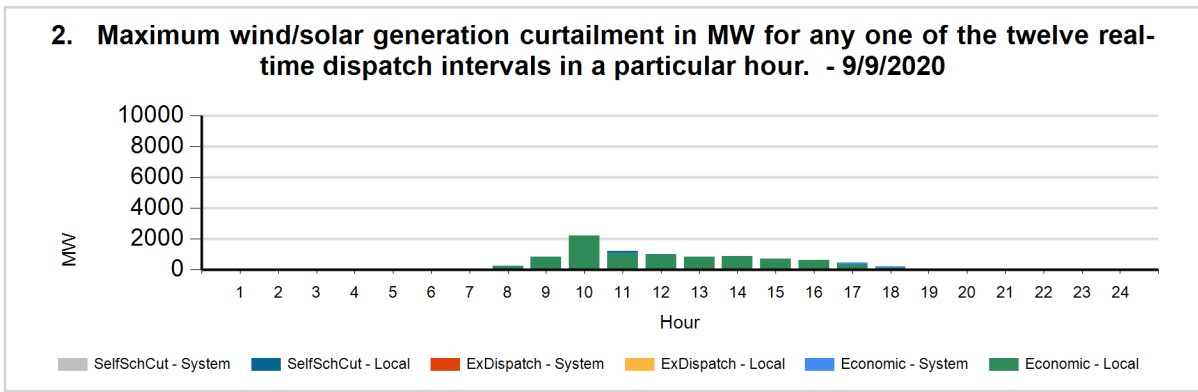
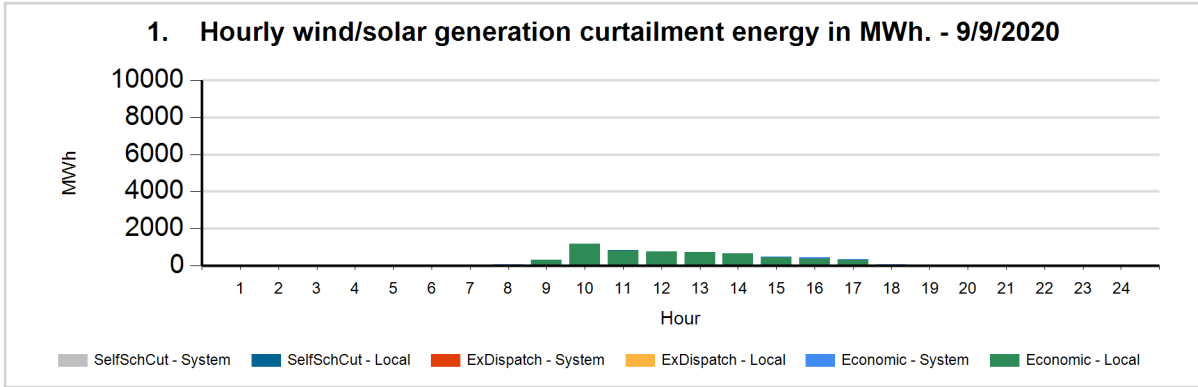
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

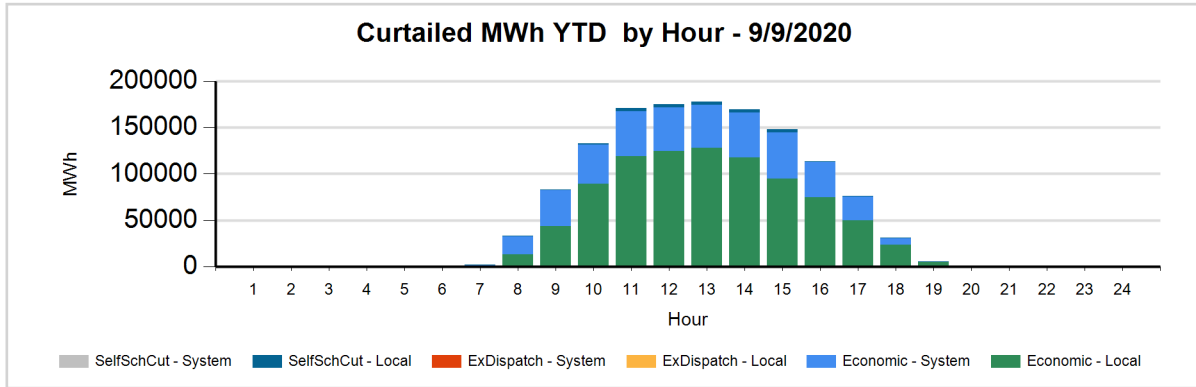
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

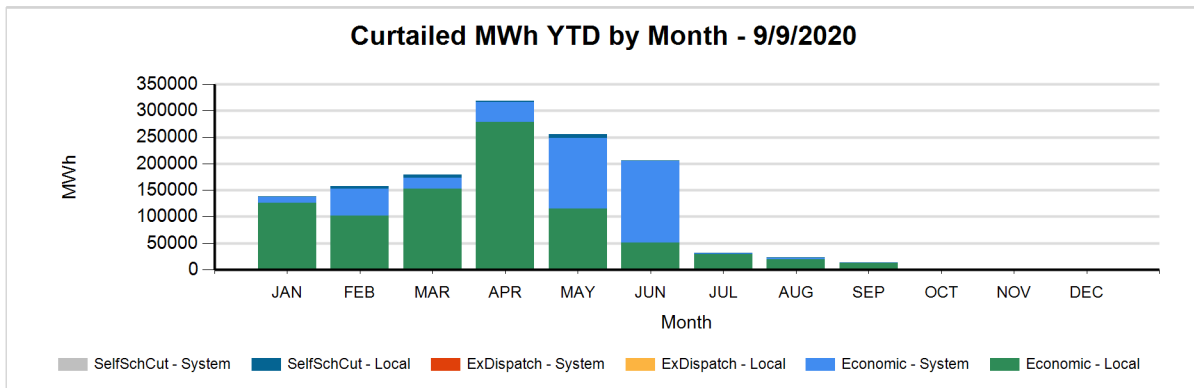
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 9/9/2020
LocalEconomic	885,921
LocalSelfSchCut	20,341
SystemEconomic	415,480
TOTAL	1,321,743

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
09/09	1	Economic	Local	WIND	3	8
09/09	2	Economic	Local	WIND	5	9
09/09	8	Economic	Local	SOLR	34	123
09/09	8	Economic	Local	WIND	23	95
09/09	8	Economic	System	SOLR	10	8
09/09	9	Economic	Local	SOLR	218	715
09/09	9	Economic	Local	WIND	106	109
09/09	10	Economic	Local	SOLR	1075	2089
09/09	10	Economic	Local	WIND	99	106
09/09	11	Economic	Local	SOLR	770	1021
09/09	11	Economic	Local	WIND	60	55
09/09	11	Economic	System	SOLR	1	8
09/09	11	SelfSchCut	Local	SOLR	11	134
09/09	12	Economic	Local	SOLR	727	913
09/09	12	Economic	Local	WIND	41	64
09/09	13	Economic	Local	SOLR	646	747
09/09	13	Economic	Local	WIND	66	102
09/09	14	Economic	Local	SOLR	567	753
09/09	14	Economic	Local	WIND	103	133
09/09	15	Economic	Local	SOLR	367	525
09/09	15	Economic	Local	WIND	112	186
09/09	15	Economic	System	SOLR	16	
09/09	16	Economic	Local	SOLR	285	490
09/09	16	Economic	Local	WIND	97	111
09/09	16	Economic	System	SOLR	48	
09/09	17	Economic	Local	SOLR	226	272
09/09	17	Economic	Local	WIND	74	69
09/09	17	Economic	System	SOLR	56	127
09/09	18	Economic	Local	SOLR	34	50
09/09	18	Economic	Local	WIND	31	50
09/09	18	Economic	System	SOLR	8	99

09/09	19	Economic	Local	SOLR	0	
09/09	19	Economic	Local	WIND	1	10
09/09	20	Economic	Local	WIND	0	5
09/09	21	Economic	Local	WIND	1	15

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.