

Wind and Solar Curtailment April 08, 2017

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.

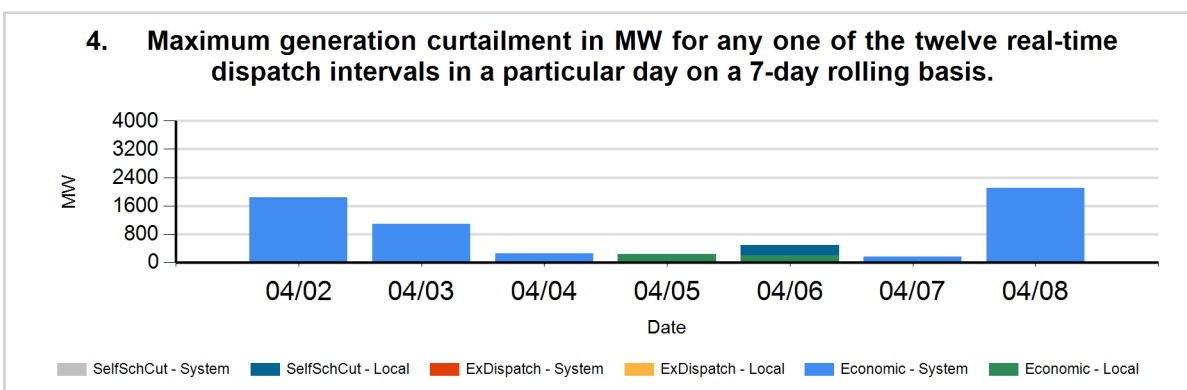
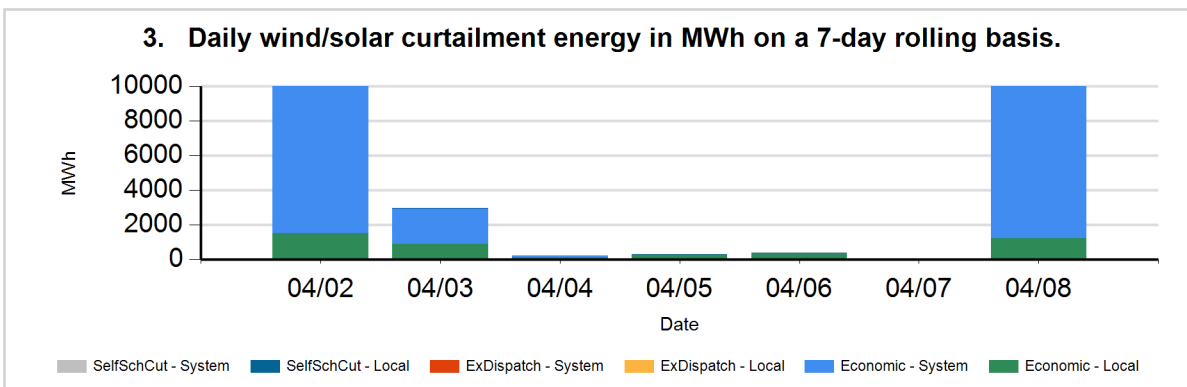
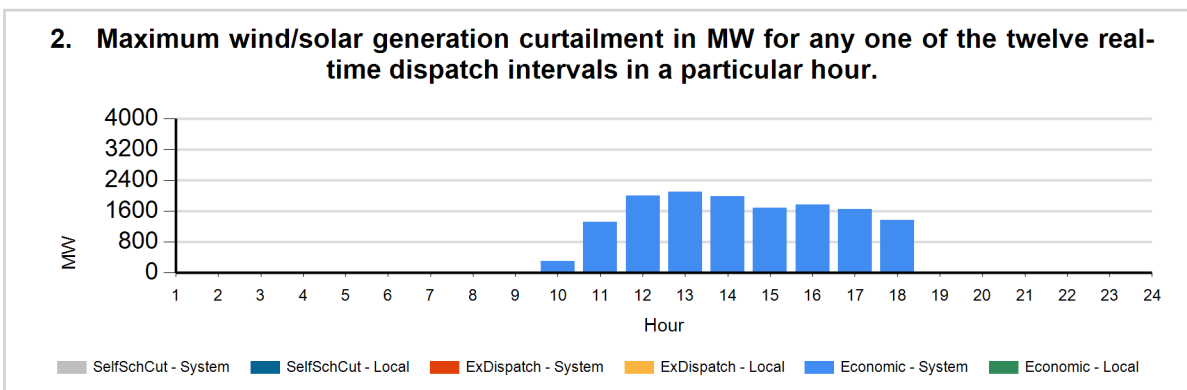
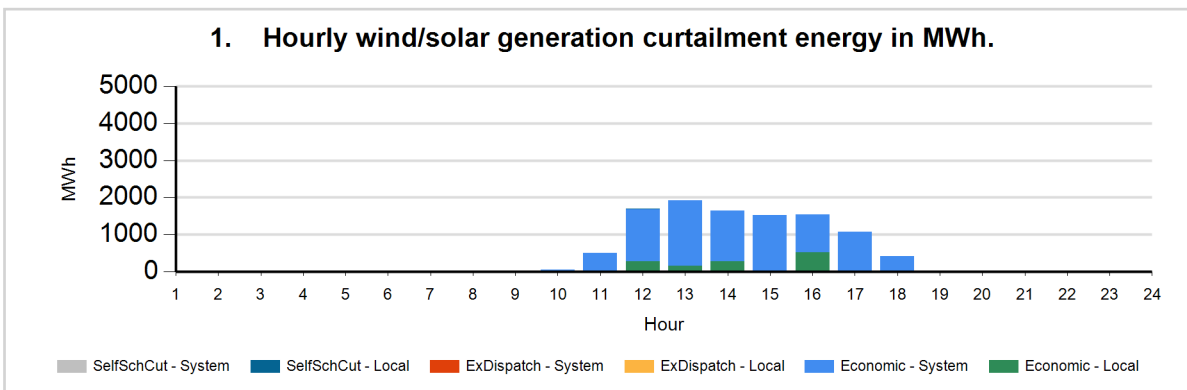
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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.



Data used to produce hourly charts

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/08	9	Economic	Local	SOLR	0	3
04/08	10	Economic	Local	SOLR	18	
04/08	10	Economic	System	SOLR	31	273
04/08	10	Economic	System	WIND	2	21
04/08	11	Economic	Local	SOLR	8	13
04/08	11	Economic	System	SOLR	485	1289
04/08	11	Economic	System	WIND	5	13
04/08	12	Economic	Local	SOLR	266	12
04/08	12	Economic	Local	WIND	1	
04/08	12	Economic	System	SOLR	1358	1719
04/08	12	Economic	System	WIND	54	271
04/08	12	SelfSchCut	Local	SOLR	11	
04/08	13	Economic	Local	SOLR	146	
04/08	13	Economic	Local	WIND	3	
04/08	13	Economic	System	SOLR	1548	1680
04/08	13	Economic	System	WIND	215	414
04/08	14	Economic	Local	SOLR	256	
04/08	14	Economic	Local	WIND	11	
04/08	14	Economic	System	SOLR	1263	1617
04/08	14	Economic	System	WIND	104	368
04/08	15	Economic	System	SOLR	1463	1500
04/08	15	Economic	System	WIND	51	178
04/08	16	Economic	Local	SOLR	490	
04/08	16	Economic	Local	WIND	31	
04/08	16	Economic	System	SOLR	954	1496
04/08	16	Economic	System	WIND	66	268
04/08	17	Economic	System	SOLR	1035	1456
04/08	17	Economic	System	WIND	40	201
04/08	18	Economic	System	SOLR	401	1270
04/08	18	Economic	System	WIND	15	90
04/08	19	Economic	Local	SOLR	0	
04/08	19	Economic	System	SOLR	0	2

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 Hong Zhou at hzhou@caiso.com.