

Wind and Solar Curtailment February 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.

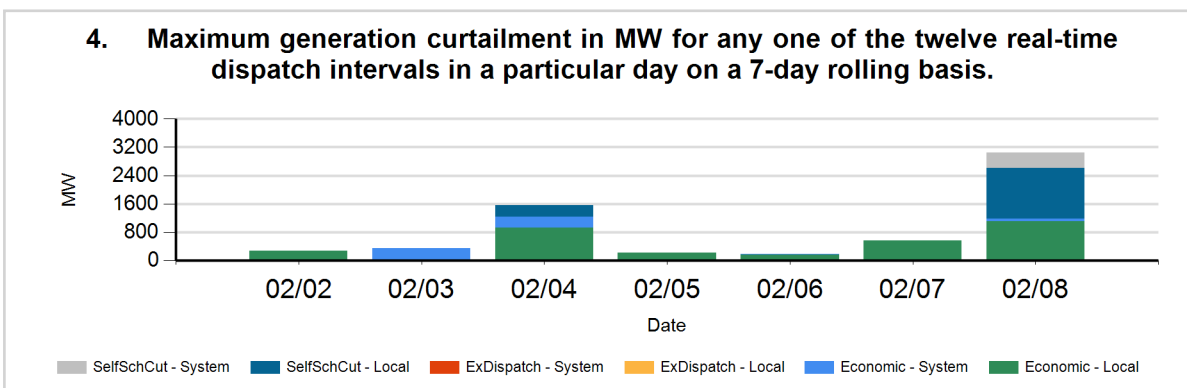
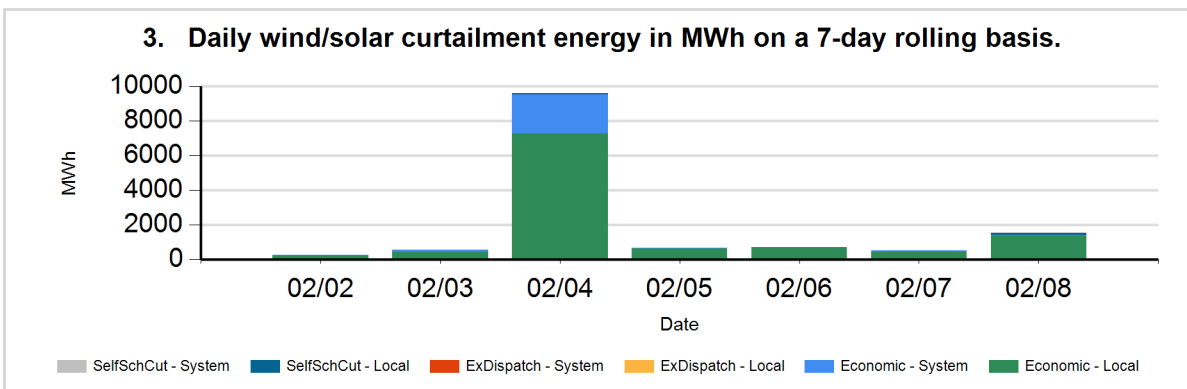
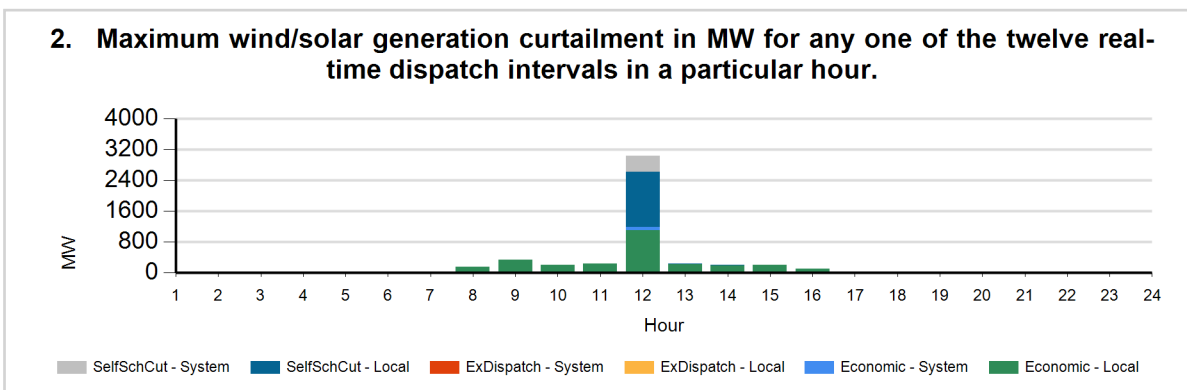
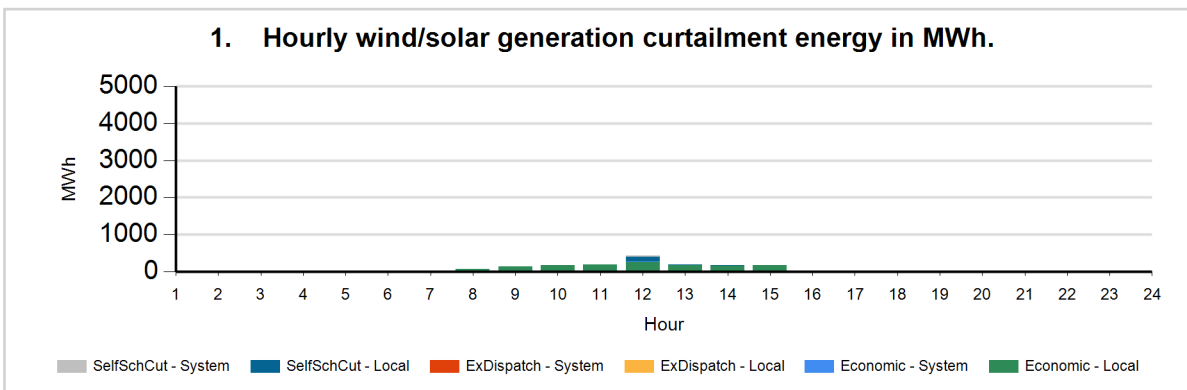
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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
02/08	8	Economic	Local	SOLR	57	147
02/08	8	Economic	Local	WIND	4	
02/08	9	Economic	Local	SOLR	120	301
02/08	9	Economic	Local	WIND	16	30
02/08	10	Economic	Local	SOLR	179	204
02/08	11	Economic	Local	SOLR	196	227
02/08	12	Economic	Local	SOLR	243	1000
02/08	12	Economic	Local	WIND	9	106
02/08	12	Economic	System	SOLR	14	43
02/08	12	Economic	System	WIND	2	27
02/08	12	SelfSchCut	Local	SOLR	73	880
02/08	12	SelfSchCut	Local	WIND	46	557
02/08	12	SelfSchCut	System	SOLR	16	189
02/08	12	SelfSchCut	System	WIND	20	235
02/08	13	Economic	Local	SOLR	188	232
02/08	13	SelfSchCut	Local	SOLR	1	2
02/08	14	Economic	Local	SOLR	175	193
02/08	14	SelfSchCut	Local	SOLR	1	1
02/08	15	Economic	Local	SOLR	173	197
02/08	16	Economic	Local	SOLR	22	100
02/08	16	Economic	System	SOLR	0	
02/08	17	Economic	System	SOLR	0	
02/08	17	Economic	System	WIND	0	3

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.