

## Wind and Solar Curtailment February 22, 2017

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why<sup>1</sup>. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation<sup>2</sup>.

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion<sup>3</sup>.
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply<sup>4</sup>.
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.

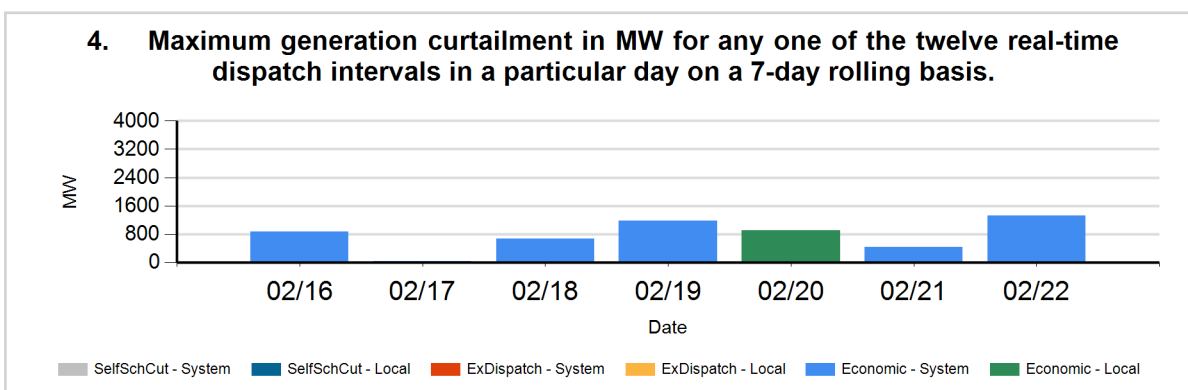
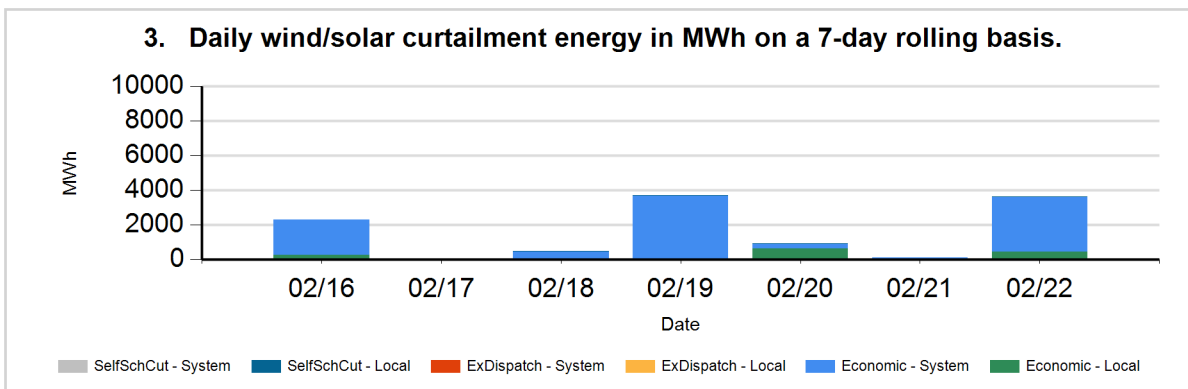
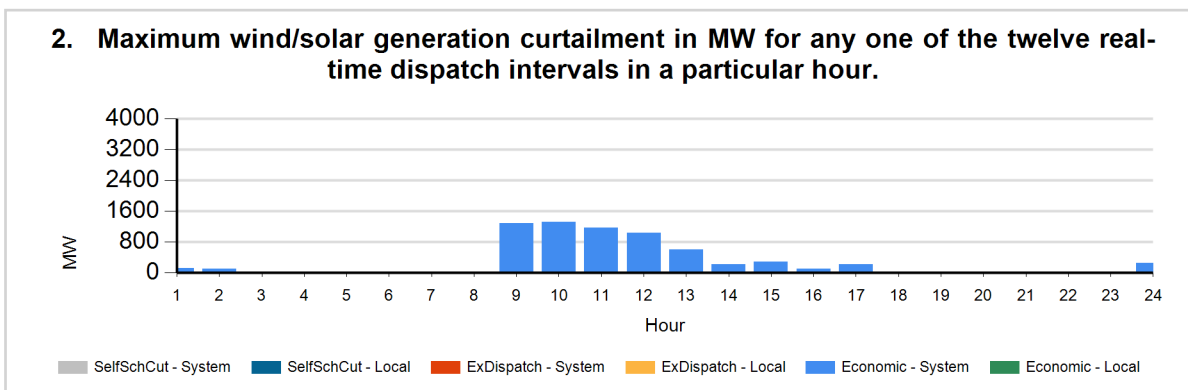
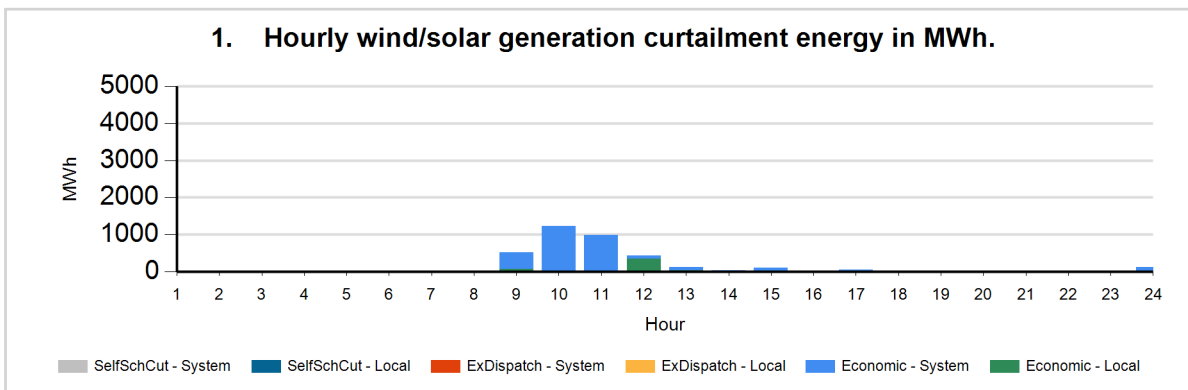
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

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

<sup>4</sup>For more information on oversupply conditions, please see: [https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](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
02/22	1	Economic	System	WIND	17	121
02/22	2	Economic	System	WIND	13	101
02/22	8	Economic	System	SOLR	0	5
02/22	9	Economic	Local	SOLR	45	
02/22	9	Economic	Local	WIND	14	
02/22	9	Economic	System	SOLR	372	961
02/22	9	Economic	System	WIND	82	321
02/22	10	Economic	System	SOLR	903	983
02/22	10	Economic	System	WIND	315	339
02/22	11	Economic	System	SOLR	886	1072
02/22	11	Economic	System	WIND	93	93
02/22	12	Economic	Local	SOLR	277	
02/22	12	Economic	Local	WIND	67	
02/22	12	Economic	System	SOLR	84	949
02/22	12	Economic	System	WIND	7	82
02/22	13	Economic	Local	SOLR	19	
02/22	13	Economic	Local	WIND	12	
02/22	13	Economic	System	SOLR	53	503
02/22	13	Economic	System	WIND	28	92
02/22	14	Economic	Local	SOLR	3	5
02/22	14	Economic	System	SOLR	23	130
02/22	14	Economic	System	WIND	10	75
02/22	15	Economic	Local	SOLR	4	6
02/22	15	Economic	System	SOLR	48	125
02/22	15	Economic	System	WIND	54	158
02/22	16	Economic	Local	SOLR	11	14
02/22	16	Economic	System	SOLR	0	1
02/22	16	Economic	System	WIND	7	85
02/22	16	SelfSchCut	Local	SOLR	2	
02/22	17	Economic	Local	SOLR	4	9
02/22	17	Economic	System	SOLR	11	55
02/22	17	Economic	System	WIND	37	154
02/22	24	Economic	System	WIND	118	256

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](mailto:hzhou@caiso.com).