

## Wind and Solar Curtailment February 04, 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.

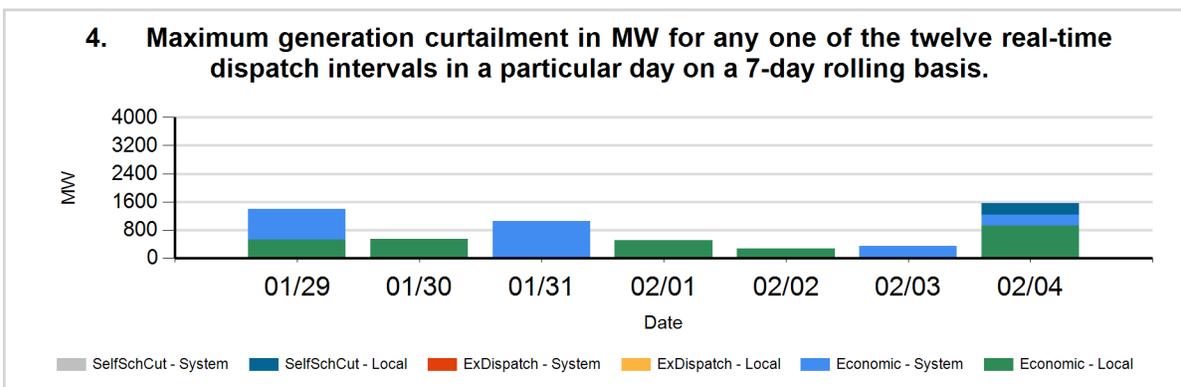
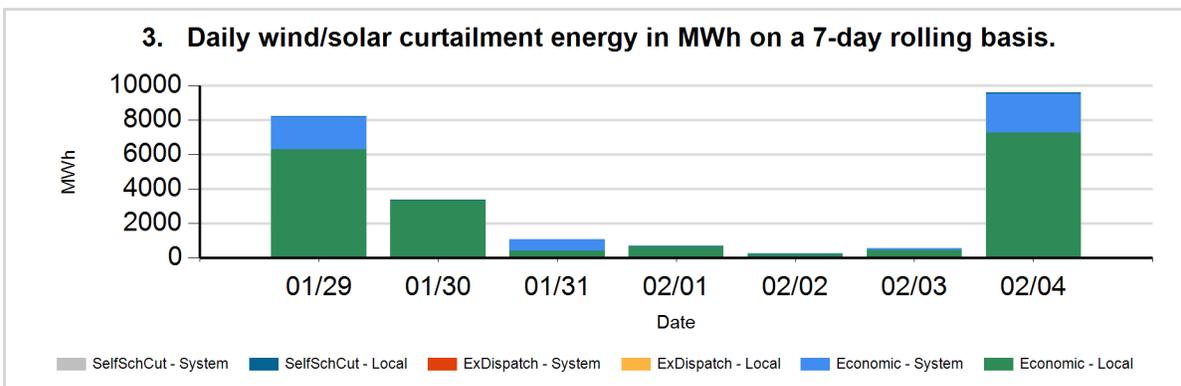
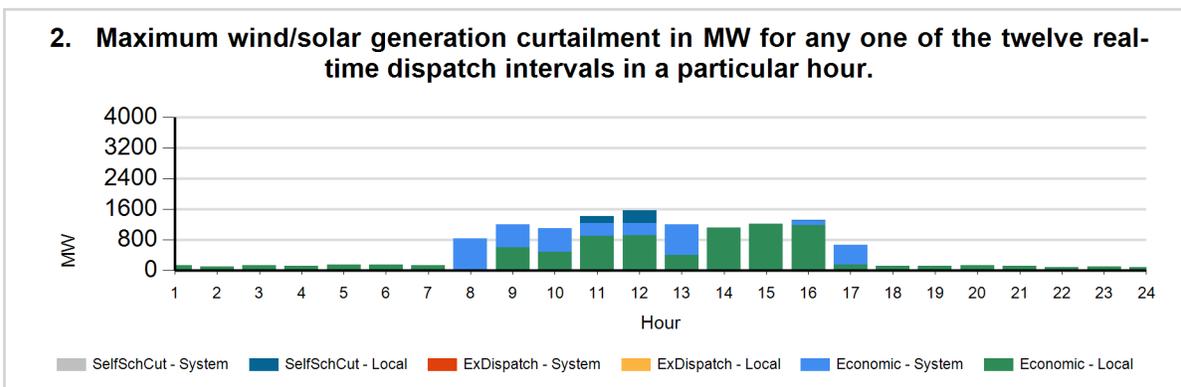
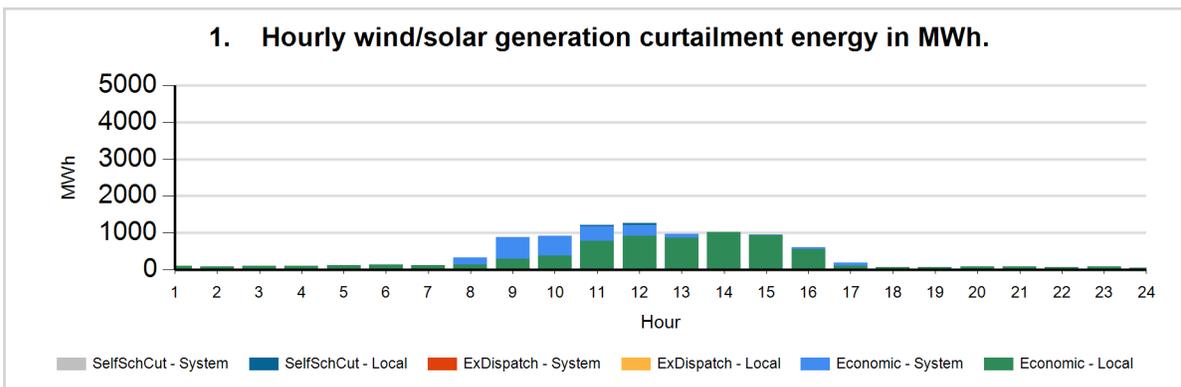
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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
02/04	1	Economic	Local	WIND	103	128
02/04	2	Economic	Local	WIND	89	101
02/04	3	Economic	Local	WIND	98	130
02/04	4	Economic	Local	WIND	99	110
02/04	5	Economic	Local	WIND	126	142
02/04	6	Economic	Local	WIND	131	141
02/04	7	Economic	Local	WIND	120	137
02/04	8	Economic	Local	WIND	136	
02/04	8	Economic	System	SOLR	129	441
02/04	8	Economic	System	WIND	60	391
02/04	9	Economic	Local	SOLR	75	228
02/04	9	Economic	Local	WIND	215	371
02/04	9	Economic	System	SOLR	475	471
02/04	9	Economic	System	WIND	121	129
02/04	10	Economic	Local	SOLR	216	239
02/04	10	Economic	Local	WIND	154	243
02/04	10	Economic	System	SOLR	487	538
02/04	10	Economic	System	WIND	53	80
02/04	11	Economic	Local	SOLR	439	522
02/04	11	Economic	Local	WIND	337	377
02/04	11	Economic	System	SOLR	377	320
02/04	11	Economic	System	WIND	32	19
02/04	11	SelfSchCut	Local	SOLR	3	35
02/04	11	SelfSchCut	Local	WIND	28	144
02/04	12	Economic	Local	SOLR	543	540
02/04	12	Economic	Local	WIND	371	379
02/04	12	Economic	System	SOLR	288	317
02/04	12	Economic	System	WIND	2	
02/04	12	SelfSchCut	Local	SOLR	24	206

02/04	12	SelfSchCut	Local	WIND	35	119
02/04	13	Economic	Local	SOLR	633	226
02/04	13	Economic	Local	WIND	232	165
02/04	13	Economic	System	SOLR	92	787
02/04	13	Economic	System	WIND	5	23
02/04	14	Economic	Local	SOLR	817	912
02/04	14	Economic	Local	WIND	200	206
02/04	15	Economic	Local	SOLR	722	854
02/04	15	Economic	Local	WIND	224	361
02/04	15	Economic	System	SOLR	3	
02/04	15	Economic	System	WIND	1	
02/04	16	Economic	Local	SOLR	359	874
02/04	16	Economic	Local	WIND	200	308
02/04	16	Economic	System	SOLR	11	31
02/04	16	Economic	System	WIND	40	107
02/04	16	SelfSchCut	Local	SOLR	0	1
02/04	17	Economic	Local	WIND	106	150
02/04	17	Economic	System	SOLR	66	465
02/04	17	Economic	System	WIND	12	51
02/04	18	Economic	Local	WIND	66	110
02/04	19	Economic	Local	WIND	73	120
02/04	20	Economic	Local	WIND	84	130
02/04	21	Economic	Local	WIND	83	107
02/04	22	Economic	Local	WIND	63	82
02/04	23	Economic	Local	WIND	83	98
02/04	24	Economic	Local	WIND	49	79

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).