

## Wind and Solar Curtailment March 25, 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.

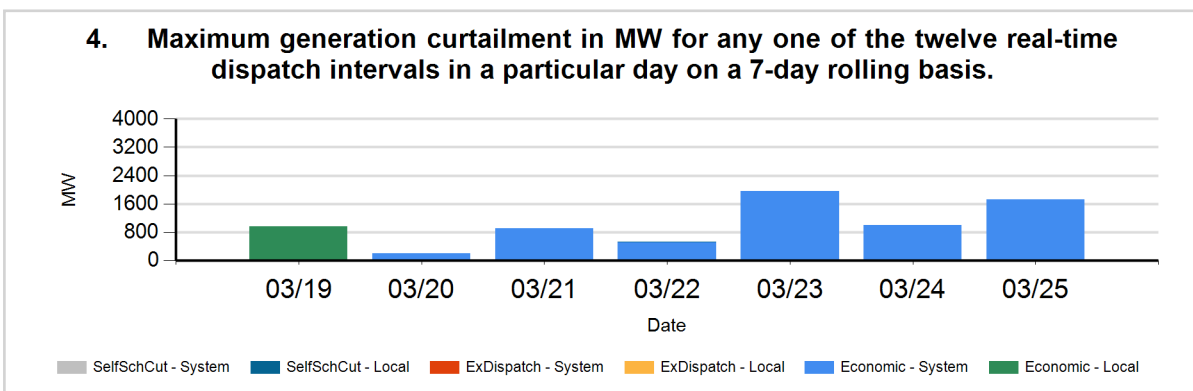
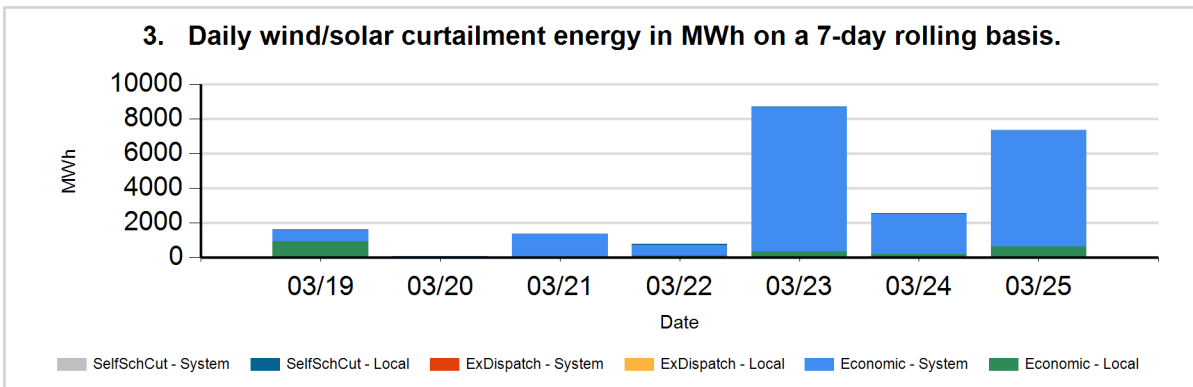
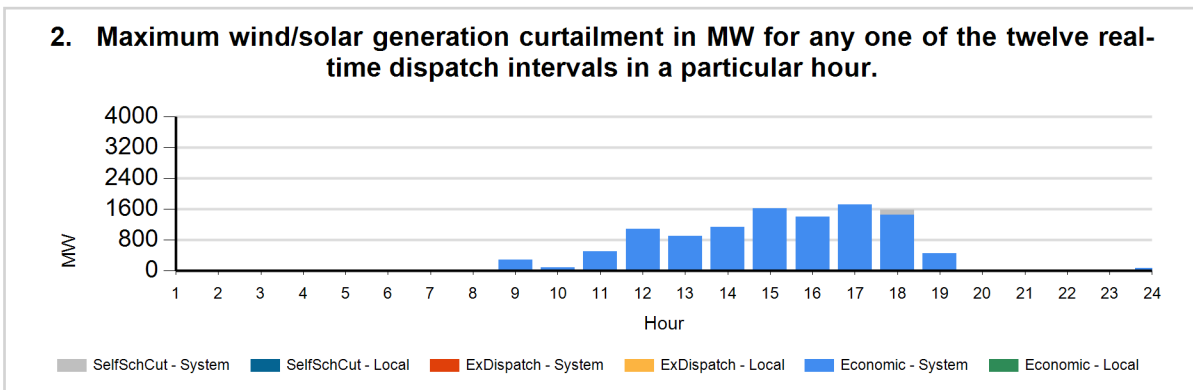
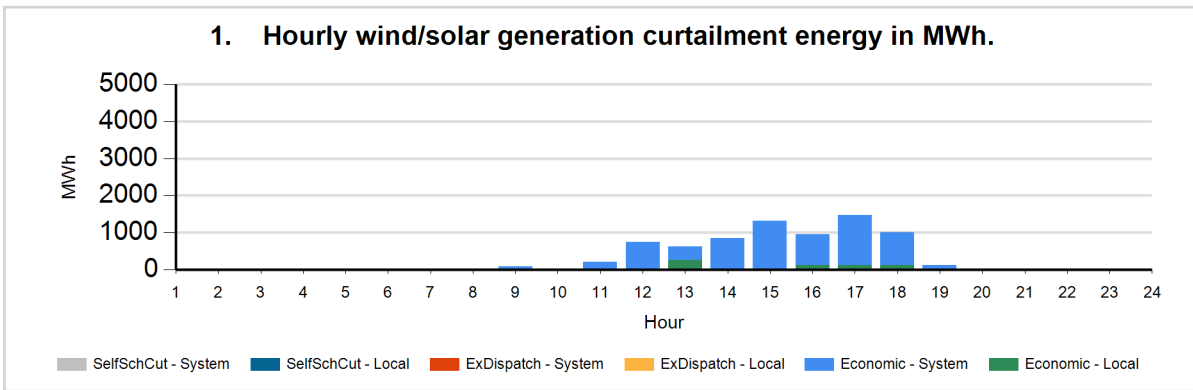
<sup>1</sup>Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

<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
03/25	8	Economic	Local	SOLR	0	
03/25	8	Economic	System	SOLR	1	3
03/25	9	Economic	Local	SOLR	0	
03/25	9	Economic	System	SOLR	40	194
03/25	9	Economic	System	WIND	41	83
03/25	10	Economic	Local	SOLR	1	
03/25	10	Economic	System	SOLR	3	8
03/25	10	Economic	System	WIND	12	75
03/25	11	Economic	Local	SOLR	1	
03/25	11	Economic	System	SOLR	152	418
03/25	11	Economic	System	WIND	46	77
03/25	12	Economic	Local	SOLR	9	
03/25	12	Economic	System	SOLR	663	1011
03/25	12	Economic	System	WIND	71	66
03/25	12	SelfSchCut	Local	SOLR	0	
03/25	13	Economic	Local	SOLR	223	15
03/25	13	Economic	Local	WIND	40	
03/25	13	Economic	System	SOLR	321	803
03/25	13	Economic	System	WIND	39	76
03/25	14	Economic	Local	SOLR	10	11
03/25	14	Economic	System	SOLR	754	1046
03/25	14	Economic	System	WIND	81	84
03/25	15	Economic	Local	SOLR	2	
03/25	15	Economic	System	SOLR	1169	1272
03/25	15	Economic	System	WIND	139	339
03/25	16	Economic	Local	SOLR	108	
03/25	16	Economic	Local	WIND	7	
03/25	16	Economic	System	SOLR	760	1321
03/25	16	Economic	System	WIND	72	79

03/25	17	Economic	Local	SOLR	95	
03/25	17	Economic	Local	WIND	16	
03/25	17	Economic	System	SOLR	1150	1322
03/25	17	Economic	System	WIND	204	402
03/25	18	Economic	Local	SOLR	81	
03/25	18	Economic	Local	WIND	34	
03/25	18	Economic	System	SOLR	686	1015
03/25	18	Economic	System	WIND	209	432
03/25	18	SelfSchCut	System	SOLR	11	127
03/25	18	SelfSchCut	System	WIND	1	10
03/25	19	Economic	System	SOLR	92	358
03/25	19	Economic	System	WIND	29	86
03/25	24	Economic	System	WIND	11	63

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).