

Wind and Solar Curtailment March 26, 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.

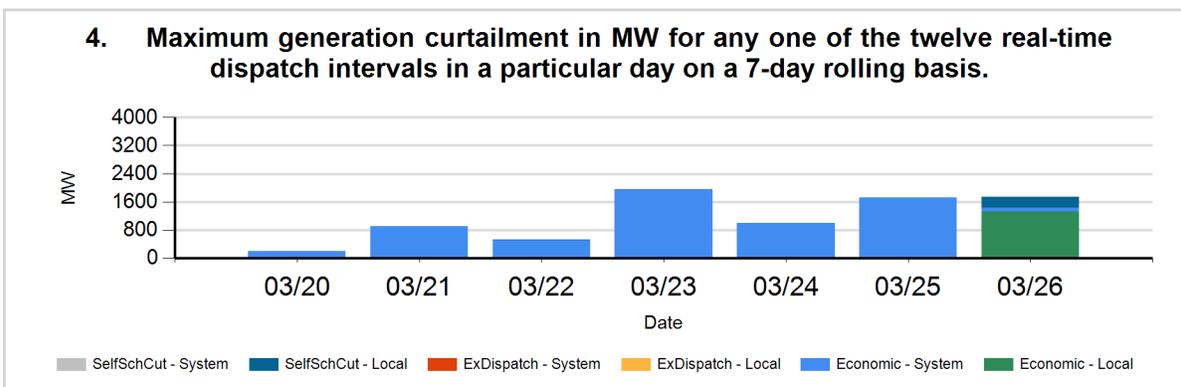
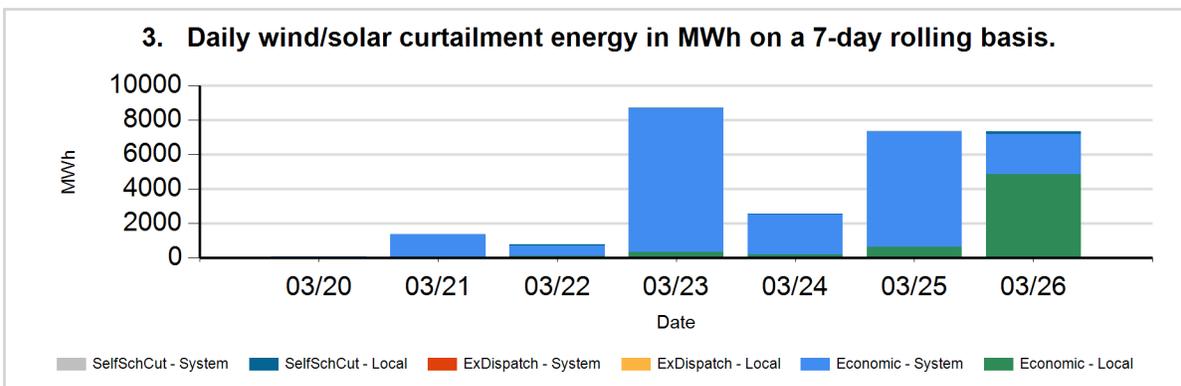
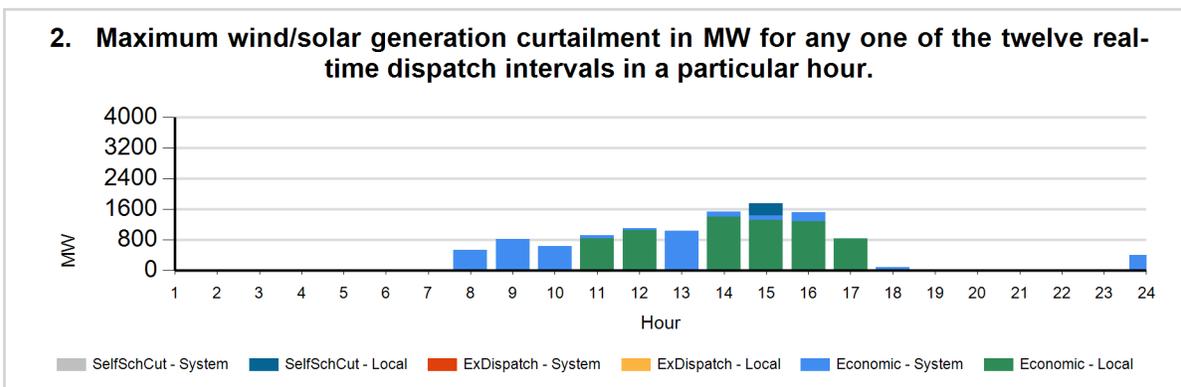
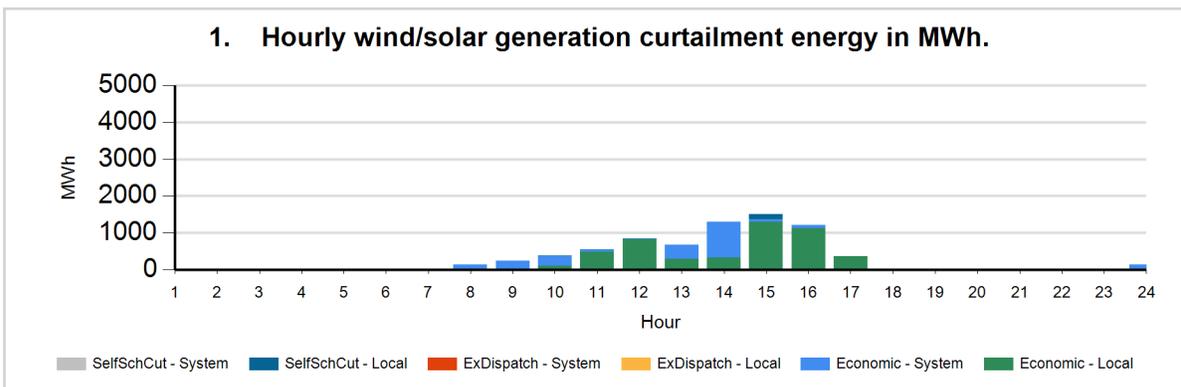
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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
03/26	5	Economic	System	WIND	0	3
03/26	8	Economic	Local	SOLR	0	
03/26	8	Economic	System	SOLR	116	488
03/26	8	Economic	System	WIND	19	50
03/26	9	Economic	Local	SOLR	10	
03/26	9	Economic	Local	WIND	4	
03/26	9	Economic	System	SOLR	193	756
03/26	9	Economic	System	WIND	26	53
03/26	10	Economic	Local	SOLR	90	
03/26	10	Economic	Local	WIND	10	
03/26	10	Economic	System	SOLR	236	585
03/26	10	Economic	System	WIND	34	51
03/26	10	SelfSchCut	Local	SOLR	2	
03/26	11	Economic	Local	SOLR	461	801
03/26	11	Economic	Local	WIND	25	31
03/26	11	Economic	System	SOLR	60	83
03/26	11	Economic	System	WIND	7	
03/26	11	SelfSchCut	Local	SOLR	0	
03/26	12	Economic	Local	SOLR	797	990
03/26	12	Economic	Local	WIND	48	55
03/26	12	Economic	System	SOLR	7	53
03/26	13	Economic	Local	SOLR	256	
03/26	13	Economic	Local	WIND	37	
03/26	13	Economic	System	SOLR	354	973
03/26	13	Economic	System	WIND	26	56
03/26	14	Economic	Local	SOLR	290	1153
03/26	14	Economic	Local	WIND	39	242
03/26	14	Economic	System	SOLR	914	127
03/26	14	Economic	System	WIND	46	8

03/26	15	Economic	Local	SOLR	1120	1128
03/26	15	Economic	Local	WIND	178	189
03/26	15	Economic	System	SOLR	62	115
03/26	15	Economic	System	WIND	8	9
03/26	15	SelfSchCut	Local	SOLR	111	128
03/26	15	SelfSchCut	Local	WIND	31	180
03/26	16	Economic	Local	SOLR	979	1129
03/26	16	Economic	Local	WIND	136	152
03/26	16	Economic	System	SOLR	88	234
03/26	16	Economic	System	WIND	1	5
03/26	16	SelfSchCut	Local	SOLR	0	
03/26	17	Economic	Local	SOLR	315	756
03/26	17	Economic	Local	WIND	53	78
03/26	17	Economic	System	SOLR	0	
03/26	18	Economic	Local	SOLR	1	
03/26	18	Economic	System	SOLR	1	6
03/26	18	Economic	System	WIND	12	81
03/26	23	Economic	System	WIND	2	23
03/26	24	Economic	System	WIND	128	391

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.