

Wind and Solar Curtailment May 02, 2020

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 systemwide oversupply.
- 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.

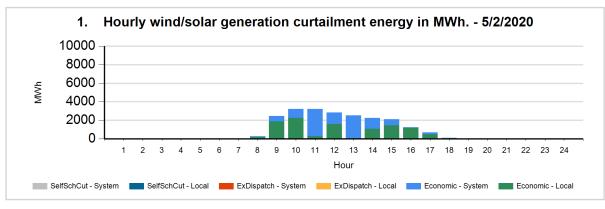
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

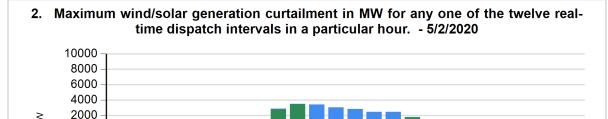
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

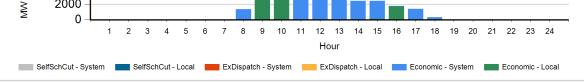
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

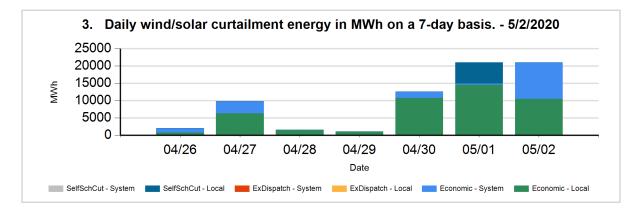


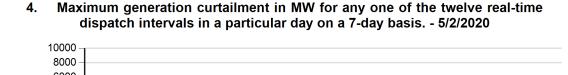
The following charts show the daily and 7-day wind and solar curtailment by category, if any.

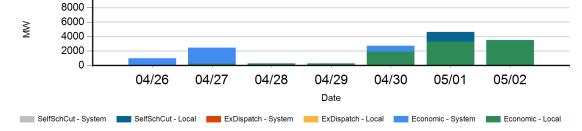






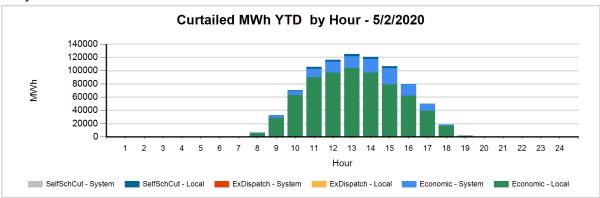




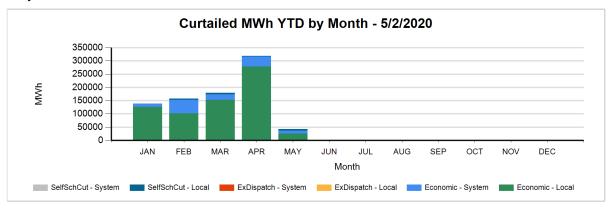




The following charts show hourly year to date wind and solar curtailment by category, if any.



The following charts show monthly year to date wind and solar curtailment by category, if any.



TYPE	YTD CURTAILED MWH - 5/2/2020		
LocalEconomic	684,501		
LocalSelfSchCut	19,405		
SystemEconomic	130,705		
TOTAL	834,611		



Data used to produce hourly chart

TAILED MW	CURTAILED MWH	FUEL TYPE	REASON	J CURT TYPE	HOU R	DATE
	3	SOLR	Local	7 Economic	7	05/02
2	5	SOLR	System	7 Economic	7	05/02
4	155	SOLR	Local	8 Economic	8	05/02
	2	WIND	Local	8 Economic	8	05/02
127	127	SOLR	System	8 Economic	8	05/02
4	6	WIND	System	8 Economic	8	05/02
264	1823	SOLR	Local	9 Economic	9	05/02
12	59	WIND	Local	9 Economic	9	05/02
9	550	SOLR	System	9 Economic	9	05/02
	25	WIND	System	9 Economic	9	05/02
332	2177	SOLR	Local	0 Economic	10	05/02
15	80	WIND	Local	0 Economic	10	05/02
	903	SOLR	System	0 Economic	10	05/02
2	57	WIND	System	0 Economic	10	05/02
2	267	SOLR	Local	11 Economic	11	05/02
	2	WIND	Local	11 Economic	11	05/02
324	2870	SOLR	System	11 Economic	11	05/02
16	89	WIND	System	11 Economic	11	05/02
	0	SOLR	Local	11 SelfSchCut	11	05/02
3	1559	SOLR	Local	2 Economic	12	05/02
	16	WIND	Local	2 Economic	12	05/02
292	1223	SOLR	System	2 Economic	12	05/02
6	33	WIND	System	2 Economic	12	05/02
	0	SOLR	Local	2 SelfSchCut	12	05/02
3	53	SOLR	Local	3 Economic	13	05/02
271	2395	SOLR	System	3 Economic	13	05/02
7	75	WIND	System	3 Economic	13	05/02
4	1026	SOLR	Local	4 Economic	14	05/02
	28	WIND	Local	4 Economic	14	05/02
234	1165	SOLR	System	4 Economic	14	05/02
7	44	WIND	System	4 Economic	14	05/02



05/02	14	SelfSchCut	Local	SOLR	0	
05/02	15	Economic	Local	SOLR	1404	140
05/02	15	Economic	Local	WIND	36	
05/02	15	Economic	System	SOLR	642	2226
05/02	15	Economic	System	WIND	41	80
05/02	15	SelfSchCut	Local	SOLR	0	
05/02	16	Economic	Local	SOLR	1135	1763
05/02	16	Economic	Local	WIND	23	30
05/02	16	Economic	System	SOLR	73	
05/02	16	Economic	System	WIND	7	10
05/02	17	Economic	Local	SOLR	487	81
05/02	17	Economic	Local	WIND	9	
05/02	17	Economic	System	SOLR	190	1271
05/02	17	Economic	System	WIND	17	76
05/02	18	Economic	Local	SOLR	90	74
05/02	18	Economic	System	SOLR	21	228
05/02	18	Economic	System	WIND	3	26
05/02	19	Economic	Local	SOLR	18	43
05/02	19	Economic	Local	WIND	2	

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 Short-Term Forecasting at ShortTermForecasting@caiso.com.