

Wind and Solar Curtailment April 05, 2021

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.

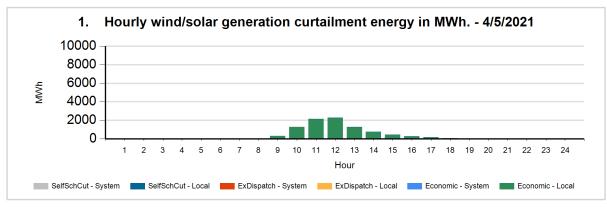
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

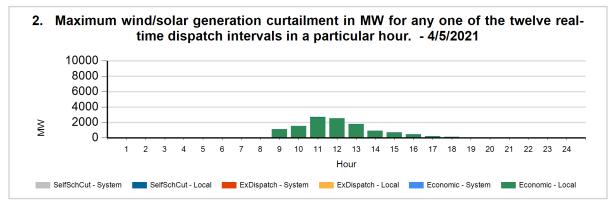
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

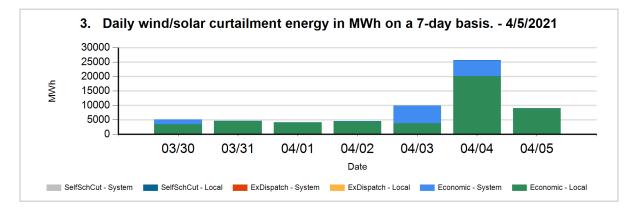
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

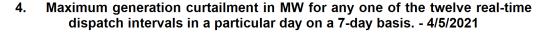


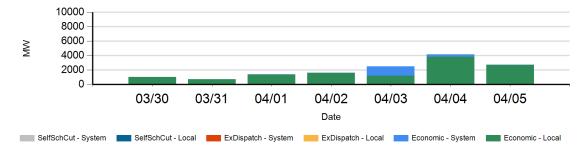
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





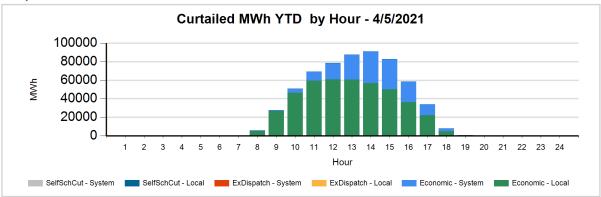




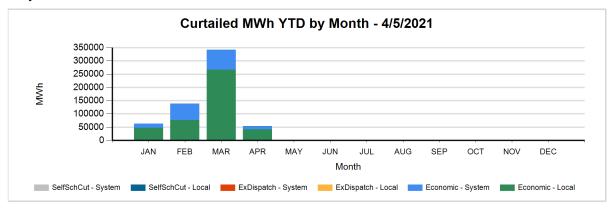




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/5/2021		
LocalEconomic	430,199		
LocalSelfSchCut	1,960		
SystemEconomic	162,957		
TOTAL	595,116		



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/05	8	Economic	Local	SOLR	25	54
04/05	9	Economic	Local	SOLR	297	996
04/05	9	Economic	Local	WIND	18	106
04/05	9	Economic	System	SOLR	0	
04/05	10	Economic	Local	SOLR	1161	1433
04/05	10	Economic	Local	WIND	113	118
04/05	11	Economic	Local	SOLR	1997	2509
04/05	11	Economic	Local	WIND	131	127
04/05	11	Economic	System	SOLR	0	
04/05	11	SelfSchCut	Local	SOLR	16	54
04/05	12	Economic	Local	SOLR	2078	2310
04/05	12	Economic	Local	WIND	176	210
04/05	12	SelfSchCut	Local	SOLR	10	
04/05	13	Economic	Local	SOLR	1139	1662
04/05	13	Economic	Local	WIND	113	115
04/05	13	SelfSchCut	Local	SOLR	13	16
04/05	14	Economic	Local	SOLR	713	897
04/05	14	Economic	Local	WIND	28	
04/05	14	SelfSchCut	Local	SOLR	22	17
04/05	15	Economic	Local	SOLR	377	539
04/05	15	Economic	Local	WIND	27	140
04/05	15	SelfSchCut	Local	SOLR	28	41
04/05	15	SelfSchCut	Local	WIND	1	
04/05	16	Economic	Local	SOLR	231	333
04/05	16	Economic	Local	WIND	11	119
04/05	16	SelfSchCut	Local	SOLR	16	18
04/05	17	Economic	Local	SOLR	143	164
04/05	17	SelfSchCut	Local	SOLR	12	19
04/05	18	Economic	Local	SOLR	66	117
04/05	18	SelfSchCut	Local	SOLR	3	8
04/05	19	Economic	Local	SOLR	2	14



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.