

## Wind and Solar Curtailment April 18, 2022

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 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.

<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.

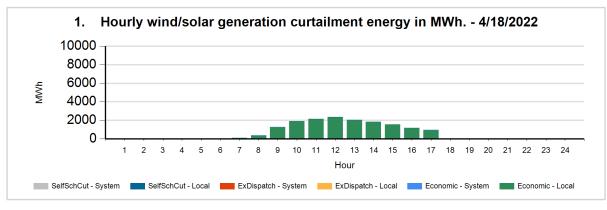
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

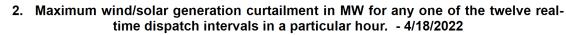
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

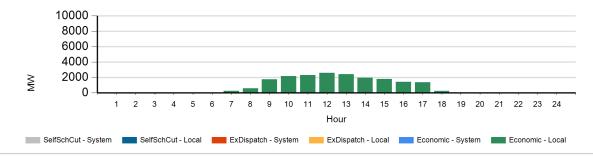
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\_FastFacts.pdf</u>

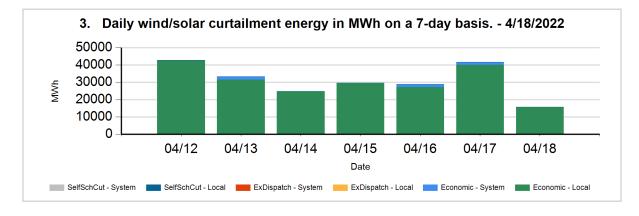


The following charts show the daily and 7-day wind and solar curtailment by category, if any.

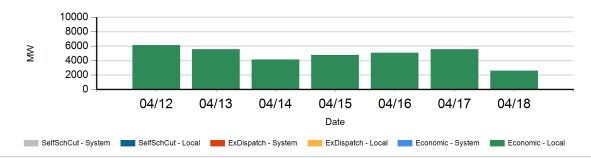






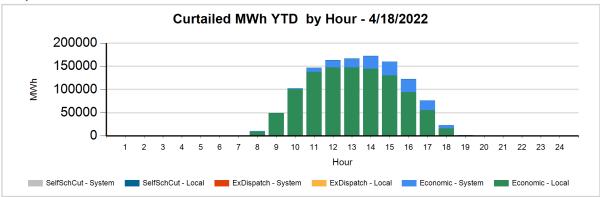


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/18/2022

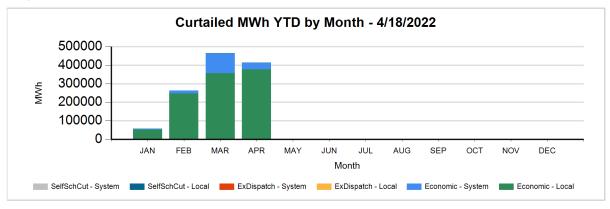




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/18/2022
LocalEconomic	1,031,842
LocalSelfSchCut	4,059
SystemEconomic	160,509
TOTAL	1,196,409



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/18	7	Economic	Local	SOLR	43	149
04/18	7	Economic	Local	WIND	68	104
04/18	7	Economic	System	SOLR	0	
04/18	8	Economic	Local	SOLR	242	461
04/18	8	Economic	Local	WIND	133	132
04/18	8	Economic	System	SOLR	1	
04/18	9	Economic	Local	SOLR	1144	1599
04/18	9	Economic	Local	WIND	144	144
04/18	9	Economic	System	SOLR	2	
04/18	9	SelfSchCut	Local	SOLR	0	
04/18	10	Economic	Local	SOLR	1658	1942
04/18	10	Economic	Local	WIND	224	228
04/18	10	SelfSchCut	Local	SOLR	1	
04/18	11	Economic	Local	SOLR	1939	2119
04/18	11	Economic	Local	WIND	188	152
04/18	11	SelfSchCut	Local	SOLR	4	12
04/18	12	Economic	Local	SOLR	2134	2330
04/18	12	Economic	Local	WIND	206	224
04/18	12	SelfSchCut	Local	SOLR	5	9
04/18	13	Economic	Local	SOLR	1851	2202
04/18	13	Economic	Local	WIND	197	204
04/18	13	SelfSchCut	Local	SOLR	4	
04/18	14	Economic	Local	SOLR	1589	1711
04/18	14	Economic	Local	WIND	248	239
04/18	14	SelfSchCut	Local	SOLR	2	
04/18	15	Economic	Local	SOLR	1293	1537
04/18	15	Economic	Local	WIND	253	258
04/18	16	Economic	Local	SOLR	921	1124
04/18	16	Economic	Local	WIND	262	264
04/18	16	SelfSchCut	Local	SOLR	3	10
04/18	17	Economic	Local	SOLR	735	1064



04/18	17	Economic	Local	WIND	200	256
04/18	17	Economic	System	SOLR	14	55
04/18	18	Economic	Local	SOLR	45	212
04/18	18	Economic	System	SOLR	0	
04/18	18	Economic	System	WIND	1	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.