

## Wind and Solar Curtailment April 19, 2022

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:

- 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.
- 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.

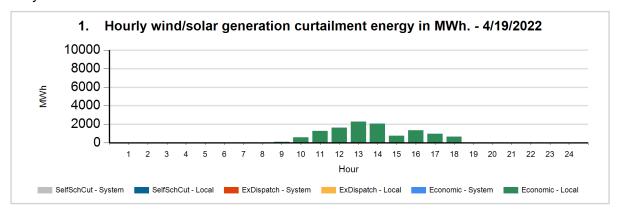
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

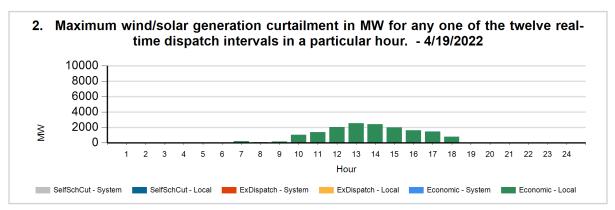
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

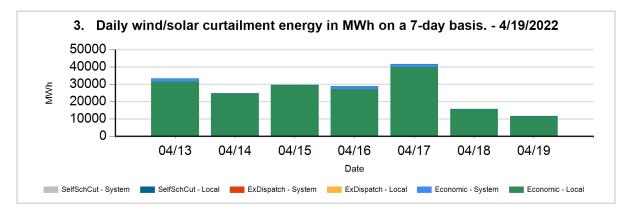
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

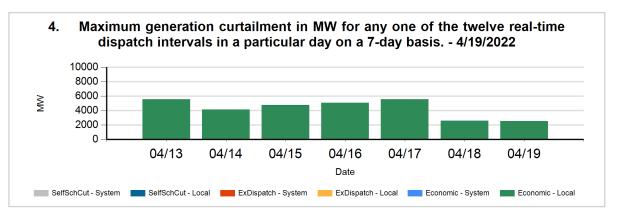


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



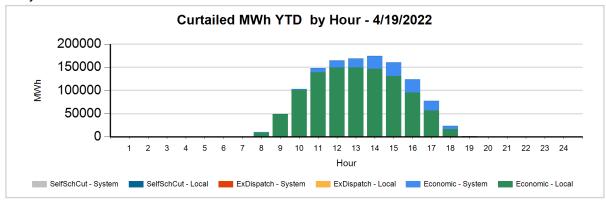




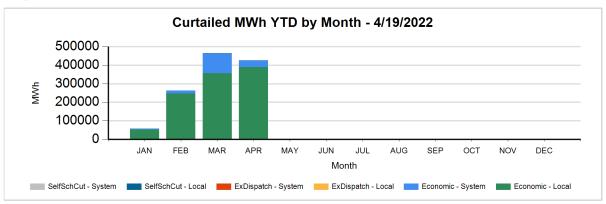




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/19/2022
LocalEconomic	1,043,547
LocalSelfSchCut	4,080
SystemEconomic	160,516
TOTAL	1,208,143



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/19	7	Economic	Local	WIND	33	196
04/19	8	Economic	Local	SOLR	10	46
04/19	8	Economic	Local	WIND	21	44
04/19	8	Economic	System	SOLR	1	
04/19	9	Economic	Local	SOLR	61	53
04/19	9	Economic	Local	WIND	46	120
04/19	9	Economic	System	SOLR	0	
04/19	10	Economic	Local	SOLR	352	747
04/19	10	Economic	Local	WIND	228	293
04/19	11	Economic	Local	SOLR	976	1075
04/19	11	Economic	Local	WIND	292	293
04/19	11	Economic	System	SOLR	0	
04/19	11	SelfSchCut	Local	SOLR	0	1
04/19	12	Economic	Local	SOLR	1291	1755
04/19	12	Economic	Local	WIND	316	272
04/19	12	SelfSchCut	Local	SOLR	2	
04/19	13	Economic	Local	SOLR	1968	2231
04/19	13	Economic	Local	WIND	308	299
04/19	14	Economic	Local	SOLR	1724	2105
04/19	14	Economic	Local	WIND	351	305
04/19	14	Economic	System	SOLR	4	
04/19	15	Economic	Local	SOLR	631	1534
04/19	15	Economic	Local	WIND	127	446
04/19	16	Economic	Local	SOLR	1076	1367
04/19	16	Economic	Local	WIND	270	270
04/19	16	SelfSchCut	Local	SOLR	0	
04/19	17	Economic	Local	SOLR	709	1226
04/19	17	Economic	Local	WIND	241	230
04/19	17	SelfSchCut	Local	SOLR	14	17
04/19	18	Economic	Local	SOLR	436	524
04/19	18	Economic	Local	WIND	225	254



04/19	18	Economic	System	SOLR	1	
04/19	18	SelfSchCut	Local	SOLR	5	
04/19	19	Economic	Local	SOLR	9	
04/19	19	Economic	Local	WIND	4	47
04/19	19	Economic	System	SOLR	1	

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.